that the information is true, accurate, and complete.

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	07/31/12
API #:	47-103-02647

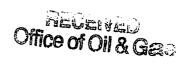
m name: Dorsey, Robert		il No.: Charles	indegrave iii	
CATION: Elevation: 1,349'	_ Quadrangle:	Littleton 7.5'		
District: Center	_ County: Wet	zel		
Latitude: 10,892' Feet South of 39 Deg	42 Min	n. 30.0 Se		
Longitude 3.999' Feet West of 80 Deg	g. <u>35</u> Mii	n. <u>00.0</u> Se	ec.	
Company: Grenadier Energy Partners, LLC				
CT Corportion 707 Virginia Street East 15th Floor Address: Charleston, WV 25301	Casing &	Used in	Left in well	Cement fill
Address: Charleston, WV 25301	Tubing	drilling		up Cu. Ft.
Agent: Dianna Stamper	24"	40'	40'	Grouted In
Inspector: Derek Haught	16"	420'	420'	495 cu.ft (CTS)
Date Permit Issued: 03/31/2011	11-3/4"	1543'	1543'	1071 cu.ft (CTS)
Date Well Work Commenced: 07/26/2011	8-5/8"	2746'	2746'	841 cu.ft (CTS)
Date Well Work Completed: 12/08/2012	5-1/2"	10326'	10326'	1901 cu.ft (CTS)
Verbal Plugging:				
Date Permission granted on:		<u> </u>		
Rotary X Cable Rig				
Total Vertical Depth (ft): 7520'			,	
Total Measured Depth (ft): 10356'				
Fresh Water Depth (ft.): Est. 280'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N				
				RECEIVED
PEN FLOW DATA (If more than two producing formati Producing formation Marcellus Shale Pay	ons please inclu	ide additional (7654' - 10160'	iata on separate ş	Office of Oil & C
Gas: Initial open flow 6342 MCF/d Oil: Initial open				
Final open flowMCF/d Final open flo				ALIC V 6 5015
Time of open flow between initial and final tests			*	AA/F)
Static rock Pressure 4125 psig (surface pressure) a	fter 168 Hou	ırs	() ()	MV Department ironmental Prot
Second producing formationPay zo	one denth (ft)			nouwe atai blot
Gas: Initial open flowMCF/d Oil: Initial open				
Final open flow MCF/d Final open flo				
Time of open flow between initial and final tests				
Static rock Pressurepsig (surface pressure) a	fterHou	ırs		

Were core samples taken? Yes	No_X	Were cuttings caught du	ring drilling? Yes_XN	ło
Were Electrical, Mechanical or Geophy GR-Compensated Neutron-Photo Density, GR	sical logs recorded on thi	s well? If yes, please list Yes	es (Electrical)	
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE V	PUT THE FOLLO' G, PHYSICAL CHANG ORD OF THE TOPS	WING: 1). DETAILS O E, ETC. 2). THE WELL I AND BOTTOMS OF AI	LOG WHICH IS A SYSTET LL FORMATIONS, INC	EMATIĆ
Perforated Intervals, Fracturing, or Stim	ulating:			
Perforations: Total Perforated Interva	al (7654' - 10160' MD)			
Fluid: 82,212 bbl Slickwater pumped	in 7 Stages			
Sand: 1,524,515 lbs 100 mesh sand,	, 1,560,285 lbs 40/70 s	and		
Plug Back Details Including Plug Type	and Depth(s): N/A			
Formations Encountered: Surface:	Top Der	oth /	Bottom Deptl	<u>1</u>
See Attached Sheet				
			Office of Oil &	Gas_

AUG 0 6 2012

WV Department of Convironmental Profection

Farmer M. Control		
Formation/Lithology	From	To
Silt & Shale	0	1040
Red Rocks	1040	1095
Sand & Shale	1095	1931
Salt Sand	2354	2372
Strate	2000	2057
Big Lime	2390	2486
Big Injun	2480	2672
Silt & Shale	2356	2900
Gordon Stray Ss	3217	3225
Silt and Shale	2910	2938
Gordon Ss	3262	3308
Silt and Shale	2991	3030
Fourth Gordon ss	3358	3360
Silt and Shale	3042	6444
Rhinestreet	6648	7078
Sonya Sh	7078	7246
Genesee Sh	7246	
Geneseo Sh	7316	7316
Trully Lm		7346
Hamilton Sh	7346	7350
Marcellus Sh	7350	7466
Onondaga	7466	7510
Onlondaga	7510	N/A



AUG (6 :ui2

WV Department of Environmental Protection

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm name:	WASHING	ON, DONALD E	. Op	erator Well	No.: MAR	Y JANE CLAI	RK 303
LOCATION:	Elevation:	1,415'	Qu	adrangle:	PINE GRO	VE 7.5'	
	District: Latitude: Longitude:	GRANT 8,270 Feet 4,600 Feet	south of 39	9 Deg 37	TZEL Min 30 Min 30	Sec. Sec.	
Company:	P.O. BOX 5	OURCES, INC. 519 V 26105-5519		Casing Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Agent:	PHILIP S. O	NDRUSEK					
Inspector: Permit Issued Well work Co Well work Co	ommenced: ompleted:	RANAGE 04/23/10 06/03/10 07/21/10	· ·				
Verbal pluggi permission gr Rotary X Total Depth (Fresh water d	ranted on: Cable feet)	Rig 3530'	_	7"	1385'	1385'	340 sks
				4 1/2"	3466'	3466'	150 sks
Salt water dep	pths (ft)			Fig. P.			
Is coal being: Coal Depths	mined in area (\) (ft):	7/N) N 800'-805'	-	Office o	CEIVED FOII & G	AS	
OPEN FLOW	V DATA			DEC	, 1 0 2012		
Prod Gas:	Final open f	flow	MCF/	d Fina	partment antal fill al open flow	Hours	
Stati	c rock pressure		psig (surface pre	ssure)	after	Hours
Gas:	Final open f Time of op	flow	MCF/ initial and fi	d Final tests	Pay zone dial open flow	v Hours	
	ic rock pressure			surface pre	•	after	Hours
OR STIMULA	TING, PHYSICAL	M, PUT THE FOLLO CHANGE, ETC. 2) T L FORMATIONS, IN	THE WELL LOG	WHICH IS A	SYSTEMAT	IC DETAILED	CTURING
		For:	EAST RESO By: Date:	URCES, IN	OSu	1/9/da 9/20/10	~

Treatment:

Treated perfs (3324'-3338') w/ 250 gals 15% HCl acid, 373 bbls cross linked gel, and 25,000# 20/40 sand.

Well Log:	0	256	Sand and Shale			
	256	280	Sand			
	280	356	Shale			
	356	368	Sand			
	368	636	Shale			
	636	644	Sand			
	644	652	Shale			
	652	662	Sand			
	662	800	Shale	•		
	800	805	Coal			
	805	846	Shale			
	846	878	Sand			
	878	1022	Shale		 	
	1022	1072	Sand	•		
	1072	1080	Shale			
	1080	1152	Sand			
	1152	1164	Shale			
	1164	1196	Sand			
	1196	1210	Shale			
	1210	1246	Sand			
	1246	1254	Shale			
	1254	1406	Sand			
	1406	1442	Shale			
	1442	1454	Sand			
	1454	1761	Shale			
	1761	1785	Sand	•		
	1785	1856	Shale Sand			
	1856	1886	Shale			
	1886	1908	Sand			
	1908 1948	1948 1956	Shale			
	1946	1974	Sand			
	1936	2210	Shale			
	2210	2236	Sand			
	2236	2390	Shale			
	2390	2418	Sand			
	2418	2430	Shale .			
	2430	2442	Sand			
	2442	2508	Big Lime			1 m - 2 m -
	2508	2730	Big Injun			
	2730	3288	Shale			
	3288	3313	Gordon Stray			
	3313	3320	Shale			
	3320	3341	Gordon			
	3341	3357	Shale			
	3357	3361	Sand			
	3361	3530	Shale			
	3530		TD			

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

901	PW
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Farm name:	WASHINGTO	ON, DONALD E.	Ope	rator Well	No.: MAR	Y JANE CLAF	2K 303	
LOCATION:	Elevation:	1,415'	Qua	drangle:	PINE GRO	VE 7.5'		
	District: Latitude: Longitude:	GRANT 8,270 Feet so 4,600 Feet w	outh of 39	Deg 37	TZEL Min 30 Min 30	Sec. Sec.		
Company:	EAST RESOUP.O. BOX 550 VIENNA, WY	•		Casing Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.	
Agent:	PHILIP S. ON	IDRUSEK						
Inspector: Permit Issued: Well work Com Well work Com Verbal plugging	pleted:	ANAGE 04/23/10 06/03/10 07/21/10				-		
permission gran Rotary X Total Depth (fee	ted on: Cableet)	Rig 3530'		7"	1385'	1385'	340 sks	
Fresh water dep				4 1/2"	3466'	3466'	150 sks	
Salt water depth	ns (ft)				CEIVED			-
Is coal being mi Coal Depths (ft)		N) N 800'-805'		Office of	foll & G	as		
OPEN FLOW I	DATA			DEC	1 0 2012			
Gas:	ing formation Initial open flo Final open flo Time of oper cock pressure	ow	MCF/d	IVO P. I Hay I Fina		Hours	3324'-3328' Bbl/ Bbl/ Hou	⁄d
Gas:	I producing form Initial open flow Final open flow Time of open rock pressure	ow	MCF/d	l Fina	Pay zone de la la open flow ssure)	v	Bbl/ Bbl/ Hou	/d
NOTE: ON BACK	- COF THIS FORM NG, PHYSICAL C	, PUT THE FOLLOW HANGE, ETC. 2) TH FORMATIONS, INC	ING: 1) DETA	ILS OF PERI WHICH IS A	FORATED IN SYSTEMAT	IC DETAILED	CTURING	
			EAST RESOU By: Date:	JRCES, IN	Co	1/2/10		

Treatment:

3357

3361

3530

3361

3530

Sand

Shale

TD

Treated perfs (3324'-3338') w/ 250 gals 15% HCl acid, 373 bbls cross linked gel, and 25,000# 20/40 sand.

Well Log:	0	256	Sand and Shale	
	256	280	Sand	
	280	356	Shale	
	356	368	Sand	
	368	636	Shale	
	636	644	Sand	
	644	652	Shale	
	652	662	Sand	
	662	800	Shale	
	800	805	Coal	
	805	846	Shale	
	846	878	Sand	
	878	1022	Shale	
	1022	1072	Sand	
	1072	1080	Shale	
	1080	1152	Sand	
	1152	1164	Shale	
	1164	1196	Sand Shala	
	1196	1210 1246	Shale Sand	
	1210 1246	1254	Shale	
	1254	1406	Sand	
	1406	1442	Shale	
	1442	1454	Sand	
	1454	1761	Shale	
	1761	1785	Sand	
	1785	1856	Shale	
	1856	1886	Sand	
	1886	1908	Shale	
	1908	1948	Sand	
	1948	1956	Shale	
	1956	1974	Sand	
	1974	2210	Shale	
	2210	2236	Sand	
	2236	2390	Shale	
	2390	2418	Sand	
	2418	2430	Shale	
	2430	2442	Sand	
	2442	2508	Big Lime	
	2508	2730	Big Injun	
	2730	3288	Shale Gordon Stray	
	3288 3313	3313 3320	Shale	
	3313	3341	Gordon	
	3341	3357	Shale	
	3341	2221	Smale	

Gas:

Static rock pressure

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name:	Targa Maxwell	Ope	erator Well No.:	Ten (10)		
LOCATION:	Elevation: 1164 District: New Milton Latitude: 39.23571 Longitude: 80.73207	Feet South of	County: Dod 39 Deg. 14 M	New Milton 7.5 dridge lin. 08.6 Sec. lin. 55.4 Sec.		
Company:	KEY OIL COM 22 GARTON P WESTON, WV	LAZA	Casing & Tubing <u>Size</u>	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
Agent:	Jan E. Chapma	an	<u>OIZE</u>	·		
Inspector:	Dave Scranage		11"	32'	201	0 - 1 44
Permit Issued:	07-21-12	-	• •	JŁ	32'	Sanded in
Well Work Cor	nmenced: 10-09-12		9-5/8"	252'	2521	70 -1 070
Well Work Cor	npleted: 10-13-12		0-010	2J2	252'	70 sks. CTS
Verbal Plugging	g N/A		7"	1226'	1226'	170 1 2
Permission gra	inted on: 08-15-12			1220	1220	170 sks. CTS
Rotary X Total Depth (fe Fresh water de Salt water dept	Cable Rig eet) 2830' epths (ft) 210' hs (ft) 1420' ined in area (Y/N)? N	o	4-1/2"	2776'	2776'	150 sks. ETOC 1100'
OPEN FLOW [7ATA					
	Gantz/Gordon		0000 0015			
	Weir		2386-2616			
	Injun		2218-2262			
	•		1996-2002			
Draduaina form	Blue Monday		1870-1890			

Producing formation Maxton Pay zone depth (ft) 1660-1670 Gas: Initial open flow 115 MCF / D Oil: Initial open flow Show Bbl / D Final open flow 1278 MCF / D Oil: Final open flow Show Bbl / D Time of open flow between initial and final tests 24 Hours

Static rock pressure 650 psig (surface pressure) after 24 All Formations Comingled.

Second producing formation Pay zone depth (ft) Initial open flow MCF / D Oil: Initial open flow Final open flow MCF / D Oil: Final open flow Time of open flow between initial and final tests

Bbl / D Bbl / D Hours psig (surface pressure) after Hours @

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

> For: KEY OIL COMPANY

PRESIDENT

Hours

Date: December 5, 2012

Targa Maxwell #10 (47-017-06133)

TREATMENT:

Gantz & Gordon	(20 holes) 2386-2616	sand, water and N2: 30,300# 20/40 sand, 282,000 SCF N2, 180 bbl. water
Weir	(25 holes) 2218-2262	sand, water and N2: 20,000# 20/40 sand, 234,000 SCF N2, 148 bbl. water
Injun	(20 holes) 1996-2002	sand, water and N2: 20,000# 20/40 sand, 229,000 SCF N2, 150 bbl. water
Blue Monday	(20 holes) 1870-1890	sand, water and N2: 20,000# 20/40 sand, 239,000 SCF N2, 140 bbl. water
Maxton	(20 holes) 1660-1670	sand, water and N2: 30,000# 20/40 sand, 268,000 SCF N2, 210 bbl. water

FORMATIONS:

Sand & Shale	0'	1600'
Maxton	1600'	1680'
Sand & Shale	1680'	1860'
Blue Monday	1860'	1890'
Shale	1890'	1900'
Big Lime	1900'	1980'
Injun	1980'	2020'
Sand & Shale	2020'	2180'
Weir	2180'	2270'
Shale	2270'	2380'
Gantz	2380'	2390'
Sand & Shale	2390'	2590'
Gordon	2590'	2620'
Shale	2620'	
TD	2020	2830'
		2830'

API #47 - 017- 06132

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name:	Targa Maxwell	Opera	tor Well No. : i	Nine (9)		
LOCATION:	Elevation: 1026 District: New Milton Latitude: 39.23299 Longitude: 80.72729	Feet South of 39 Feet West of 80	County: Dodd Deg. 13 Mi	lew Milton 7.5 Iridge n. 58.8 Sec. n. 30.0 Sec.		
Company:	KEY OIL COMP 22 GARTON PL WESTON, WV	AZA 26452	Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
Agent: Inspector: Permit Issued:	Jan E. Chapma Dave Scranage 07-27-12	n	11"	34'	Pulled	N/A
Well Work Con	nmenced: 10-01-12 npleted: 10-05-12		9-5/8"	252'	252'	75 sks. CTS
Verbal Plugging Permission grad	N/A nted on: 08-15-12		7"	1137'	1137'	170 sks. CTS
Rotary X Total Depth (fe Fresh water depth Salt water depth	Cable Rig eet) 2705' pths (ft) 140' hs (ft) 1400' ined in area (Y / N)? No		4-1/2"	2667'	2667'	150 sks. ETOC 1100'
Producing form Gas: Initial of Final of Time of Static rock pres All Formations Second produci Gas: Initial of Final of	DATA Gordon Gantz Weir Keener & Injun ation Blue Monday pen flow 141 MC pen flow 1520 M f open flow between initial sure 725 psig (surfa s Comingled. ing formation pen flow MCF / D topen flow between initial	ce pressure) after 2 Pay zone depth Oil: Initial oper Oil: Final open and final tests	n flow Show n flow 2 24 24 (ft) n flow	Bbl / D Bbl / D Hours Hours Bbl / D Bbl / D Hours		
Static rock pres	sure psig (surf	ace pressure) after		Hours		

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: KEY OIL COMPANY

Date: December 5, 2012

PRESIDENT

Targa Maxwell #9 (47-017-06132)

TREATMENT:

Gordon	(20 holes) 2472-2491	sand, water and N2: 30,000# 20/40 sand, 288,000 SCF N2, 180 bbl. water
Gantz	(20 holes) 2260-2266	sand, water and N2: 20,000# 20/40 sand, 238,000 SCF N2, 142 bbl. water
Weir	(21 holes) 2074-2124	sand, water and N2: 20,000# 20/40 sand, 227,000 SCF N2, 140 bbl. water
Keener & Injun	(20 holes) 1856-1892	sand, water and N2: 20,100# 20/40 sand, 234,000 SCF N2, 140 bbl. water
Blue Monday	(20 holes) 1750-1760	sand, water and N2: 18,200# 20/40 sand, 214,000 SCF N2, 181 bbl. water

FORMATIONS:

0'	1230'
	1330'
1330'	1500'
1500'	1560'
1560'	1720'
1720'	1740'
1740'	1760'
1760'	1840'
1840'	1860'
	1890'
	2050'
: -	2140'
	2260'
	2270'
	2470'
	2491'
	2705'
2731	2705'
	1500' 1560' 1720' 1740'

API #47 - 017- 06131

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name:	Targa Maxwell	Opera	ator Well No.:	Eight (8)		
LOCATION:	Elevation: 1141 District: New Miltor Latitude: 39.22970 Longitude: 80.73029	Feet South of 39	•			
Company:	KEY OIL COM 22 GARTON F WESTON, WV	PLAZA	Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
Well Work Com	Jan E. Chapm Dave Scranag 07-27-12 nmenced: 10-14-12 npleted: 10-19-12		11" 9-5/8"	32' 252'	32' 252'	Sanded In 75 sks. CTS
Rotary X Total Depth (fe Fresh water depti	nted on: 08-15-12 Cable Rig eet) 2860' pths (ft) 170' hs (ft) 1400' ined in area (Y / N)?	No	7" 4-1/2"	1223' 2778'	1223' 2778'	170 sks. CTS 160 sks. ETOC 1100'
Final op Time of Static rock pres All Formations Second product Gas: Initial of Final op	Gantz/Gordon Weir Injun Keener ation Blue Monday pen flow 119 pen flow 1061 f open flow between inition scure 1000 psig (sure the common state of	face pressure) after Pay zone dep Oil: Initial op Oil: Final ope	en flow Show en flow 2 24 24 th (ft) en flow	Bbl / D Bbl / D Hours Hours Bbl / D Bbl / D		
Static rock pres	f open flow between initi ssure psig (so	al and final tests urface pressure) after		Hours Hours		

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For-KEY OIL COMPANY

y: Jan Lamon

PRESIDENT

Date: December 5, 2012

Targa Maxwell #8 (47-017-06131)

TREATMENT:

Gordon/Ganta	z (19 holes) 2380-2610	sand, water and N2: 30,000# 20/40 sand, 280,000 SC 181 bbl. water	F N2,
Weir	(25 holes) 2176-2240	sand, water and N2: 20,000# 20/40 sand, 257,000 SC 147 bbl. water	F N2,
Injun	(20 holes) 2006-2018	sand, water and N2: 20,000# 20/40 sand, 230,000 SC 143 bbl. water	F N2,
Keener	(20 holes) 1952-1960	sand, water and N2: 3,000# 20/40 sand, 201,000 SCF 91 bbl. water	: N2,
Blue Monday	(20 holes) 1870-1896	sand, water and N2: 15,000# 20/40 sand, 235,000 SCI 141 bbl. water	F N2,

FORMATIONS:

Sand & Shale	0'	1230'
Shale	1230'	1630'
Maxton	1630'	
Shale		1680'
	1680'	1840'
Little Lime	1840'	1870'
Blue Monday	1870'	1900'
Big Lime	1900'	1950'
Keener	1950'	1960'
Sand	1960'	1990'
Injun	1990'	2020'
Sand & Shale	2020'	2170'
Weir	2170'	2260'
Shale	2260'	2380'
Gantz	2380'	2390'
Shale	2390'	2590'
Gordon	-	
	2590'	2610'
Shale	2610'	2860'
TD		2860'

Static rock pressure

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

		•				
Farm Name:	Targa Maxwell	Opera	tor Well No. :	Seven (7)		
LOCATION:	Elevation: 1041 District: New Milton Latitude: 39.23405 Longitude: 80.72719	Feet South of 39 Feet West of 80	County: Dodo Deg. 14 Mi	New Milton 7.5 dridge in. 02.6 Sec. in. 37.9 Sec.		
Company:	KEY OIL COMP 22 GARTON PL WESTON, WV	AZA	Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
Agent: Inspector: Permit Issued:	** _* . _		11"	32'	Pulled	. N/A
Well Work Cor	· ·		9-5/8"	252'	252'	90 sks. CTS
	g N/A anted on: 08-15-12		7"	1140'	1140'	160 sks. CTS
Salt water dept	epths(ft)150' ths(ft) 1400' nined in area(Y/N)? No	,	4-1/2"	2720'	2720'	150 sks. ETOC 1100'
Producing form Gas: Initial o	ppen flow 103 MC	Pay zone depth (ft) F / D Oil: Initial oper CF / D Oil: Final open	flow 2	Bbl / D		
	f open flow between initial ssure 725 psig (surface	and final tests 2	4 4	Bbl / D Hours Hours		
Second produc Gas: Initial o Final op	ing formation pen flow MCF / D pen flow MCF / D f open flow between initial :	Pay zone depth Oil: Initial open Oil: Final open and final tests	Îlow	Bbl / D Bbl / D Hours		

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: KEY OIL COMPANY

psig (surface pressure) after

Date: December 5, 2012

PRESIDENT

Hours

MAN DECOMMENT OF THE WAY TO THE

Targa Maxwell #7 (47-017-06130)

TREATMENT:

Gordon & 5 th Sand	(20 holes) 2528-2678	sand, water and N2: 30,100# 20/40 sand, 301,000 SCF N2, 184 bbl. water
Gantz	(20 holes) 2304-2310	sand, water and N2: 20,000# 20/40 sand, 249,000 SCF N2, 143 bbl. water
Weir	(23 holes) 2102-2166	sand, water and N2: 20,000# 20/40 sand, 246,000 SCF N2, 140 bbl. water
Keener & Injun	(20 holes) 1894-1942	sand, water and N2: 30,300# 20/40 sand, 414,000 SCF N2, 233 bbl. water
Blue Monday	(20 holes) 1798-1808	sand, water and N2: 20,000# 20/40 sand, 225,000 SCF N2, 161 bbl. water

FORMATIONS:

Sand & Shale	0,	1300'
Salt Sand	1300'	1350'
Shale	1350'	
Little Lime		1770'
	1770'	1790'
Blue Monday	1790'	1820'
Sand	1820'	1890'
Keener	1890'	1900'
Injun	1900'	1950'
Shale	1950'	2100'
Weir	2100'	2180'
Sand & Shale	2180'	2300'
Gantz	2300'	2310'
Shale	2310'	2510°
Gordon	2510'	2540 [°]
5 th Sand	2540'	2678
Shale	2678'	
TD	-010	2765'
10		2765'

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	1-3 1-2012	
API#:	47-069-00061	

Farm name: George Gantzer 8H	Operator We	ll No.: 832294		
LOCATION: Elevation: 1260'	_ Quadrangle:	Valley Grove WV		
District: Tridelphia	County: Ohio)	·	
Latitude: 4750' Feet South of 40 Deg.	05 Mir	n. ⁰⁰ Se		
Longitude 13790' Feet West of 80 Deg	. <u>35</u> Mir	n. <u>00</u> Se	c.	
Company: Chesapeake Appalachia, L.L.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	Driven
Agent: Eric Gillespie	13 3/8"	686'	686'	701 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2000'	2000'	908 Cu. Ft.
Date Permit Issued: 8/18/2010	5 1/2"	12675'	12675'	2473 Cu. Ft.
Date Well Work Commenced: 1/16/2011				
Date Well Work Completed: 6/5/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6,509'		<u> </u>		
Total Measured Depth (ft): 12,677'				
Fresh Water Depth (ft.): 30'				
Salt Water Depth (ft.): 1135'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 575'				
Void(s) encountered (N/Y) Depth(s) Y 575'	<u> </u>			
OPEN FLOW DATA (If more than two producing formati	zone depth (ft) flow <u> </u>	6,528'-12,538' Bbl/d bl/d	lata on separate s	iheet)
Static rock Plessure psig (surface pressure) a	1101			
	one depth (ft)	21.1/3		
Gas: Initial open flow MCF/d Oil: Initial open Final open flow MCF/d Final open flo		3bl/d sbl/d		
Final open flowMCF/d Final open flo Time of open flow between initial and final tests				
Static rock Pressure psig (surface pressure) a				

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Dallono Lileciano
Signature

7-19-2012 Date

Were core samples taken? Yes_	No_N	Were cuttings caught	during drilling? Yes Y	No
Were Electrical, Mechanical or Go	eophysical logs recorded on R from 5552-12620' MD.	n this well? If yes, please lis	GR, neutron, density, a	nd resistivity
NOTE: IN THE AREA BE FRACTURING OR STIMULA DETAILED GEOLOGICAL COAL ENCOUNTERED BY T	ATING, PHYSICAL CHA RECORD OF THE TO	NGE, ETC. 2). THE WEL PS AND BOTTOMS OF	L LOG WHICH IS A SY ALL FORMATIONS,	YSTEMATIC
Perforated Intervals, Fracturing, o	or Stimulating:			
(See Attached)	 			
Plug Back Details Including Plug	Type and Depth(s): Pilot	Hole PBTD - Cemen	t @ 5,506'	
Lateral Wellbore PBTD -	- Cement @ 12,558	.21'		
Formations Encountered: Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>
Surface:	Тор	Depth /	Bottom I	<u>Depth</u>

PERFORATION RECORD ATTACHMENT

Well Name and Number: George Gantzer 8H (832294)

PERFORATION RECORD			STIMULATION RECORD							
Interval Perforated					FI	Fluid		Propping Agent		
Date	From	То	Date	Interval	Treated	Type	Amount	Туре	Amount	Injection
5/26/2011	12,216	12,538	5/26/2011	12,216	12,538	Slk Wtr	10,848	Sand	480,O00	80.0
5/26/2011	11,816	12,138	5/26/2011	11,816	12,138	Slk Wtr	10,558	Sand	480,600	83.0
5/27/2011	11,416	11,738	5/27/2011	11,416	11,738	Slk Wtr	10,732	Sand	478,500	85.0
5/28/2011	10,997	11,338	5/28/2011	10,997	11,338	Slk Wtr	15,732	Sand	478,900	79.0
5/29/2011	10,603	10,938	5/29/2011	10,603	10,938	Slk Wtr	13,511	Sand	476,500	79.0
5/29/2011	10,200	10,538	5/29/2011	10,200	10,538	Slk Wtr	18,019	Sand	250,500	62.0
6/2/2011	9,728	10,050	6/2/2011	9,728	10,050	Sik Wtr	9,812	Sand	479,100	81.0
6/3/2011	9,328	9,648	6/3/2011	9,328	9,648	Slk Wtr	10,384	Sand	489,000	81.0
6/3/2011	8,935	9,250	6/3/2011	8,935	9,250	Slk Wtr	10,491	Sand	480,000	86.0
6/3/2011	8,528	8,850	6/3/2011	8,528	8,850	Slk Wtr	10,399	Sand	480,000	85.0
6/4/2011	8,128	8,450	6/4/2011	8,128	8,450	Slk Wtr	10,407	Sand	484,000	86.0
6/4/2011	7,728	8,050	6/4/2011	7,728	8,050	Slk Wtr	10,205	Sand	484,000	87.0
6/4/2011	7,328	7,650	6/4/2011	7,328	7,650	Slk Wtr	10,290	Sand	474,000	84.0
6/5/2011	6,928	7,250	6/5/2011	6,928	7,250	Slk Wtr	11,026	Sand	472,500	85.0
6/5/2011	6,528	6,850	6/5/2011	6,528	6,850	Slk Wtr	11,338	Sand	494,640	87.0
										ļ
										}
										
										

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SS	0	575
PITTSBURGH COAL	575	585
LS/SHALE	585	700
SS	700	1200
SHALE	1200	1290
SS	1290	1750
BIG LIME (LS)	1750	1800
BIG INJUN (SS)	1800	2011
SHALE	2011	6203
GENESEO (SH)	6203	6226
TULLY (LS)	6226	6256
HAMILTON (SH)	6256	6367
MARCELLUS (SH)	6367	6424
ONONDAGA (LS)	6424	
TD OF PILOT HOLE		6486 /

LATERAL SIDETRACK WELLBORE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	575	575
PITTSBURGH COAL	575	575	585	585
LS/SHALE	585	585	700	700
SS	700	700	1200	1200
SHALE	1200	1200	1290	1290
SS	1290	1290	1750	1750
BIG LIME (LS)	1750	1750	1800	180O
BIG INJUN (SS)	1800	1800	2011	2011
SHALE	2011	2011	6251	6218
GENESEO (SH)	6251	6218	6266	623O
TULLY (LS)	6266	6230	6142	6125
HAMILTON (SH)	6142	6125	6519	6374
MARCELLUS (SH)	6519	6374		
TD of Lateral			12677	650 9

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SS	0	575
PITTSBURGH COAL	575	585
LS/SHALE	585	700
SS	700	1200
SHALE	1200	1290
SS	1290	1750
BIG LIME (LS)	1750	1800
BIG INJUN (SS)	1800	2011
SHALE	2011	6203
GENESEO (SH)	6203	6226
TULLY (LS)	6226	6256
HAMILTON (SH)	6256	6367
MARCELLUS (SH)	6367	6424
ONONDAGA (LS)	6424	
TD OF PILOT HOLE		6486 /

LATERAL SIDETRACK WELLBORE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	575	575
PITTSBURGH COAL	575	575	585	585
LS/SHALE	585	585	700	700
SS	700	700	1200	1200
SHALE	1200	1200	1290	1290
SS	1290	1290	1750	1750
BIG LIME (LS)	1750	1750	1800	1800
BIG INJUN (SS)	1800	1800	2011	2011
SHALE	2011	2011	6251	6218
GENESEO (SH)	6251	6218	6266	6230
TULLY (LS)	6266	6230	6142	6125
HAMILTON (SH)	6142	6125	6519	6374
MARCELLUS (SH)	6519	6374		
TD of Lateral			12677	6509

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-23-2012	f's.
API#:	47-069-00093	

Farm na	ame: Thelma Hays OHI 8H	Operator Wel	l No.: 833790		
LOCAT	FION: Elevation: 1250'	Quadrangle: _	Bethany		
	District: Liberty	County: Ohio			
	Latitude: 3500' Feet South of 40 Deg.	10 Min			
	Longitude 5550 Feet West of 80 Deg.	32 Min	. <u>30</u> Sec.		
	Company: Chesapeake Appalachia, L.L.C.	,			
	Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	Oklahoma City, OK 73154-0496	20"	101'	101'	174 Cu. Ft.
	Agent: Eric Gillespie	13 3/8"	654'	654'	701 Cu. Ft.
	Inspector: Bill Hendershot	9 5/8"	2099'	2099'	923 Cu. Ft.
	Date Permit Issued: 8-30-2011	5 1/2"	13803'	13803'	2891 Cu. Ft.
	Date Well Work Commenced: 11-25-2011				
	Date Well Work Completed: 5-19-2012				
,	Verbal Plugging:	<i>y</i> -	3.4.5.	in in Variation	
	Date Permission granted on:	Ç.,.	Indu -		
	Rotary Cable Rig		AUS 9 7 1	1912	
	Total Vertical Depth (ft): 6433'				
	Total Measured Depth (ft): 13803'	V.			
	Fresh Water Depth (ft.): 200'	and i	10 10 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Salt Water Depth (ft.): 800'				
	Is coal being mined in area (N/Y)?		-		
	Coal Depths (ft.): 589'				
	Void(s) encountered (N/Y) Depth(s) Y 590'				
	void(b) oneodinered (1W1) Behallo)	1			<u> </u>
	EN FLOW DATA (If more than two producing formation			ta on separate sh	eet)
	Producing formation Marcellus Pay a Gas: Initial open flow MCF/d Oil: Initial open flow	zone depth (ft)	bl/d		
•	Final open flow 1,462* MCF/d Final open flow		ol/d		
	Time of open flow between initial and final tests 44		*Calculated		
S	Static rock Pressure 4.181* psig (surface pressure) af				
_					
	Gas: Initial open flow MCF/d Oil:				
•	Final open flow MCF/d Final open flow				
	Time of open flow between initial and final tests				
S	Static rock Pressurepsig (surface pressure) at				
I aaudie	y under penalty of law that I have personally examined	and am familia	r with the inform	nation submitted	on this document a
all the	y under penalty of law that I have personally examined attachments and that, based on my inquiry of those indi-	viduals immedi	ately responsible	e for obtaining the	ne information I bel
	e information is true, accurate, and complete.		, ,	J	
	\				

Were core samples taken?	YesNo_N	Were cuttings cau	ight during drilling? YesY	No
Were Electrical, Mechanical LWD GR from 5760-13803' MD.	l or Geophysical logs record	led on this well? If yes, please	e list	
FRACTURING OR STIM DETAILED GEOLOGIC	MULATING, PHYSICAL CAL RECORD OF THE	CHANGE, ETC. 2). THE W	ILS OF PERFORATED INT ELL LOG WHICH IS A SYS OF ALL FORMATIONS, IN L DEPTH.	TEMATIC
Perforated Intervals, Fracture	ring, or Stimulating:			
(See Attached)				
		· · · · · · · · · · · · · · · · · · ·		
Plug Back Details Including	Plug Type and Depth(s):			
Formations Encountered: Surface:		Top Depth /	Bottom Dep	oth
(See Attached)				
				
				

PERFORATION RECORD ATTACHMENT

Well Number and Name: 833790 Thelma Hays OHI 8H

PERFORATION RECORD			STIMULATION RECORD							
	Interval P	erforated				F	luid	Propp	ing Agent	Average
Date	From	To	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
4/13/2012	13,143	13,672	5/11/2012	13,143	13,672	Sik wtr	11,815	Sand	630,460	74.0
5/11/2012	12,510	13,039	5/11/2012	12,510	13,039	Slk wtr	10,920	Sand	633,360	79.0
5/12/2012	11,878	12,407	5/12/2012	11,878	12,407	Sik wtr	9,877	Sand	622,560	78.0
5/12/2012	11,246	11,775	5/12/2012	11,246	11,775	Slk wtr	10,384	Sand	631,220	80.0
5/13/2012	10,614	11,142	5/16/2012	10,614	11,142	Sik wtr	12,882	Sand	629,220	78.0
5/16/2012	9,981	10,510	5/17/2012	9,981	10,510	Slk wtr	10,287	Sand	630,800	80.0
5/17/2012	9,349	9,878	5/17/2012	9,349	9,878	Slk wtr	11,582	Sand	628,860	78.0
5/17/2012	8,717	9,246	5/17/2012	8,717	9,246	Sik wtr	10,114	Sand	626,800	80.0
5/17/2012	8,085	8,613	5/18/2012	8,085	8,613	Slk wtr	9,998	Sand	631,920	80.0
5/19/2012	7,452	7,981	5/19/2012	7,452	7,981	Slk wtr	11,447	Sand	627,230	80.0
5/19/2012	6,820	7,349	5/19/2012	6,820	7,349	Slk wtr	9,853	Sand	629,680	80.0
 	-							 		
						<u> </u>			L	

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 6433 ft TVD @ 13511 ft MD

JAA3TAJ 40 OT			13803	8779
MARCELLUS (SH)	T/49	6889		
(H2) NOTJIMAH	t979	9777	ፒ ∠ቱ9	6889
דטרנץ (נג)	6211	1819	6264	9777
CENEZEO (2H)	0619	9193	2777	1819
SHALE	1920	1920	0619	8919
BIG เทากท (SS)	1646	1646	1920	1920
BIG FIME (F2)	1620	1620	9 1 91	1646
SS/HS	OTST	otst	1620	1620
SS	062	062	OTST	OTST
SS/HS/S7	S6S	S6S	06۷	064
PITTSBURG COAL	685	685	S6S	S6S
S7/SS	300	300	685	689
HS/S7	0	0	300	300
Formation/Lithology	ابا) (آئا) (آئا)	Top Depth, (升) UVT	Bottom Depth,	Attom Depth, (۴۱) (۲۲)

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-17-2012	ย
API#:	47-051-01326	-

Farm name: Bonnette 3H		Operator Well No.: 831493				
LOCAT	ΓΙΟΝ: Elevation: 1,457'	Quadrangle: Wileyville				
	District: Meade	County: Marsh	nall			
	Latitude: 1.010' Feet South of 39 Deg.	45 Min	. <u>00</u> Sec	•		
	Longitude 10.325 Feet West of 80 Deg.	42 Min	. <u>30</u> Sec	•		
,	Company: Chesapeake Appalachia, L.L.C.					
	Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
	Oklahoma City, OK 73154-0496	20"	100'	100'	145 Cu. Ft.	
	Agent: Eric Gillespie	13 3/8"	1,220'	1,220'	1375 Cu. Ft.	
	Inspector: Bill Hendershot	9 5/8"	2,752'	2,752'	1263 Cu. Ft.	
	Date Permit Issued: 11-12-2009	5 1/2"	12,450'	12,450'	3183 Cu. Ft.	
	Date Well Work Commenced: 11-21-2011					
	Date Well Work Completed: 5-18-2012					
	Verbal Plugging:) 17 ₁ 17 0	aris Systems Note: South the St		
	Date Permission granted on:		# dia Pode∭, e, o	Section in the Section	133	
	Rotary Cable Rig		No. of the Control of	·		
	Total Vertical Depth (ft): 7,095'		AUt	97172		
	Total Measured Depth (ft): 12,450'		* 2 * 5			
	Fresh Water Depth (ft.): 395'		return		of an eng	
	Salt Water Depth (ft.): None			A 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	and the s	
	Is coal being mined in area (N/Y)? N					
	Coal Depths (ft.): 375'					
	Void(s) encountered (N/Y) Depth(s) N					
F G	N FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 pay 2 pays: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests 24 pays (surface pressure) after the producing formation of pays 2	one depth (ft) 7 ow Bt 48	.673'-12,302' Dl/d l/d *Calculated	ta on separate sl	neet)	
G	econd producing formation Pay zor as: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests tatic rock Pressure psig (surface pressure) after	owBb Hours	ol/d l/d	·		

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mallone Childians
Signature

<u>3-21-2012</u> Date

Were core samples taken? YesNo_X	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs rec	orded on this well? If yes, please list LWD GR from 6540-12450' MD.
FRACTURING OR STIMULATING, PHYSICA	E FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, AL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC HE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
(See Attached)	
Plug Back Details Including Plug Type and Depth(s)	:
Formations Encountered: Surface:	Top Depth / Bottom Depth
(See Attached)	

PERFORATION RECORD ATTACHMENT

Well Number and Name: 831493 Bonnette 3H

PERFO	RATION RE	CORD				STIMULAT	ION RECOR	.D		
	Interval P	erforated				F	luid	Proppi	ing Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
1/20/2012	11,920	12,302	5/13/2012	11,920	12,302	Slk wtr	7,838	Sand	474,940	67
5/13/2012	11,212	11,821	5/15/2012	11,212	11,821	Slk wtr	11,011	Sand	692,514	83
5/15/2012	10,504	11,119	5/15/2012	10,504	11,119	Slk wtr	12,318	Sand	692,620	85
5/15/2012	9,796	10,406	5/16/2012	9,796	10,406	Slk wtr	10,711	Sand	686,680	84
5/16/2012	9,089	9,698	5/16/2012	9,089	9,698	Slk wtr	10,985	Sand	692,920	85
5/16/2012	8,381	8,990	5/18/2012	8,381	8,990	Slk wtr	12,143	Sand	691,660	81
5/18/2012	7,673	8,282	5/19/2012	7,673	8,282	Slk wtr	12,454	Sand	707,240	76
	-						l			

LATERAL WELLBORE

Maximum TVD of wellbore: 7095 ft TVD @ 7467 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
Limestone/SS/Shale	0	0	1110	1110
Pittsburgh Coal	1110	1110	1120	1120
Limestone/Shale	1120	1120	2261	2261
Big Lime	2261	2261	2399	2399
Big Injun	2399	2399	2607	2607
Shale	2607	2607	7032	6943
Geneseo	7032	6943	7056	6960
Tully	7056	6960	7238	7057
Marcellus	7238	7057	12450	6959

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-21-2012
API#:	47-009-00118

Farm name: Edward Zatta BRK 10H	Operator Wel	l No.: 834339			
LOCATION: Elevation: 1220'	Quadrangle: Tiltonsville				
District: Buffalo	County: Brook	(e			
Latitude: 2120' Feet South of 40 Deg.					
- • • • • • • • • • • • • • • • • • • •	37 Min				
Company: Chesapeake Appalachia, L.L.C.					
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Oklahoma City, OK 73154-0496	26"	42'	42'	701 Cu. Ft.	
Agent: Eric Gillespie	20"	304'	304'	550 Cu. Ft.	
Inspector: Bill Hendershot	13 3/8"	650'	650'	701 Cu. Ft.	
Date Permit Issued: 1-18-2012	9 5/8"	1708'	1708'	712 Cu. Ft.	
Date Well Work Commenced: 3-14-2012	5 1/2"	10826'	10826'	2357 Cu. Ft.	
Date Well Work Completed: 5-30-2012					
Verbal Plugging:					
Date Permission granted on:		\$24.11.15			
Rotary Cable Rig		64	ii Qerre		
Total Vertical Depth (ft): 5754'					
Total Measured Depth (ft): 10829'				3.	
Fresh Water Depth (ft.): 70', 250'				-5.60	
Salt Water Depth (ft.): 1350'					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 252'					
Void(s) encountered (N/Y) Depth(s) Y 261'					
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay z Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests	one depth (ft) 6. owBb Bbl	130'-10,691' 1/d	a on separate sh	eet)	
Static rock Pressurepsig (surface pressure) aft	Hours er Hour	2			
Second producing formation Pay zon	e depth (ft)				
Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow	wBb	I/d /a			
Time of open flow between initial and final tests	Hours	⁄u			
Static rock Pressurepsig (surface pressure) after		5			

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlew Cillians
Signature

<u>S-24-2012</u> Date

Were core samples taken? Yes No	<u>N</u>	Were cuttings caught du	uring drilling? Yes Y	No
Were Electrical, Mechanical or Geophysica LWD GR from 5202-10829' MD.	l logs recorded on this	well? If yes, please list_		
NOTE: IN THE AREA BELOW POST FRACTURING OR STIMULATING, POST DETAILED GEOLOGICAL RECORD COAL ENCOUNTERED BY THE WELL	HYSICAL CHANGE OF THE TOPS A	, ETC. 2). THE WELL ND BOTTOMS OF A	LOG WHICH IS A SY LL FORMATIONS, I	STEMATIC
Perforated Intervals, Fracturing, or Stimulat	ting:			
(See Attached)				
Plug Back Details Including Plug Type and	Depth(s):	Street Control of the		
Formations Encountered: Surface:	Top Dept	h /	Bottom D	<u>Depth</u>
(See Attached)				
			-	
				

PERFORATION RECORD ATTACHMENT

Well Number and Name: 834339 Edward Zatta BRK 10H

PERFO	RATION RE	CORD	STIMULATION RECORD							
	Interval P	erforated				F	luid	Propp	ing Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
5/3/2012	10,120	10,691	5/23/2012	10,120		Slk wtr	7,466	Sand	668,260	78
5/23/2012	9,455	10,026	5/24/2012	9,455	10,026	Slk wtr	10,566	Sand	666,060	80
5/24/2012	8,790	9,361	5/24/2012	8,790	9,361	Sik wtr	10,948	Sand	666,060	80
5/24/2012	8,125	8,696	5/24/2012	8,125	8,696	Slk wtr	10,735	Sand	662,440	80
5/25/2012	7,460	8,031	5/29/2012	7,460	8,031	Slk wtr	10,497	Sand	663,620	80
5/29/2012	6,797	7,366	5/29/2012	6,797	7,366	Slk wtr	13,316	Sand	669,760	80
5/29/2012	6,130	6,701	5/30/2012	6,130	6,701	Slk wtr	10,140	Sand	666,400	80
										L

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5754 ft TVD @ 10829 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	252	252
PITTSBURG COAL	252	252	260	260
SS/LS	260	260	1000	1000
SS	1000	1000	1100	1100
BIG LIME (LS)	1100	1100	1306	1306
BIG INJUN (SS)	1306	1306	1509	1509
SHALE	1509	1509	5749	5544
GENESEO (SH)	5749	5544	5767	5556
TULLY (LS)	5767	5556	5832	5600
HAMILTON (SH)	5832	5600	5988	5687
MARCELLUS (SH)	5988	5687		
TD OF LATERAL			10829	5754

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/19/2012
API#:	47-017-06045

Farm name: Ash, Allen L. & Janet S.		Operator Well No.: Webb Unit 2H				
LOCATION: Elevation: 921'		Quadrangle: Salem 7.5'				
	District: McClellan	County: Doddr	idge			
	Latitude: 4,826 Feet South of 39 Deg.	22 <u>Min.</u>	30 Sec	•		
	Longitude 2,374 Feet West of 80 Deg.	32 Min.	Sec.	•		
	Company: Antero Resources Appalachian Corp					
	Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
	Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft Class A	
	Agent: CT Corporation System	13-3/8" 54.5#	531'	531'	738 Cu. Ft. Class A	
	Inspector: Sam Ward	9-5/8" 36#	2796'	2796'	1138 Cu. Ft. Class A	
Ī	Date Permit Issued: 2/6/2012	5-1/2" 20#	13033'	13033'	3126 Cu. Ft. Class H	
	Date Well Work Commenced: 3/21/2012					
	Date Well Work Completed: 9/18/2012	2-3/8" 4.7#	7131'			
	Verbal Plugging: N/A					
	Date Permission granted on: N/A					
	Rotary Cable Rig					
	Total Vertical Depth (ft): 7,103' TVD					
	Total Measured Depth (ft): 13,033' MD, 7,036' TV	D (BHL)				
ĺ	Fresh Water Depth (ft.): 40', 192'					
	Salt Water Depth (ft.): 545', 1644', 1692'	1	· · · · · · · · · · · · · · · · · · ·			
	Is coal being mined in area (N/Y)? No					
	Coal Depths (ft.): 181', 244', 311', 434', 624', 68	84', 711'	1			
	Void(s) encountered (N/Y) Depth(s) No, N/A					
ODE			do additional de	oto on conomite s	cheat)	
	N FLOW DATA (If more than two producing formation Producing formation Pay 1	zone depth (ft)_	7,088' TVD (T	op)	incer)	
	as: Initial open flow MCF/d Oil: Initial open f	low_N/ABI	bl/d			
	Final open flow 8,901 MCF/d Final open flow	w <u>N/A</u> Bb	ol/d			
	Time of open flow between initial and final tests N/A	Hours				
S	tatic rock Pressure 3800 psig (surface pressure) at	fter Hou	rs			
	• — — — — — — — — — — — — — — — — — — —	ne depth (ft)	11/1	7. F.N	22 PF	
C	Final open flow MCF/d Oil: Initial open flow		bl/d	מַ		
Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours) 1
S	tatic rock Pressure psig (surface pressure) as			<u></u>	銀 ~ 吊足	; 2
	under penalty of law that I have personally examined		r with the inform	تِ nation submitteِ	d on thi Diocument	and
all the	attachments and that, based on my inquiry of those indi	viduals immedi	ately responsible	le for obtaining	the information I b	elieve
that the	information is true, accurate, and complete	$\boldsymbol{\wedge}$		1 1	AS AS	
	A di Signature	nella	_ 11	1210 12 Date	É -	
	O.g.iatare					

Were core samples taken? Yes	No X Were cutting	gs caught during drilling? YesNoX
W. Bl. C. L.M. Louiseles Comban	· - 1 1 1 - 1 4 · 110 · 16 ·	
Were Electrical, Mechanical or Geophys	ical logs recorded on this Well? If yes, p	Please reference wireline logs submitted with Form WR-35 for Webb Unit 1H.
FRACTURING OR STIMULATING	, PHYSICAL CHANGE, ETC. 2). TH RD OF THE TOPS AND BOTTO	ETAILS OF PERFORATED INTERVALS, HE WELL LOG WHICH IS A SYSTEMATIC MS OF ALL FORMATIONS, INCLUDING OTAL DEPTH.
Perforated Intervals, Fracturing, or Stimu	alating:	
Perforations: 7485'-12,968' MD (1	1128 holes)	
Frac'd w/ 8,500 gals 15% HCL Ad	cid, 121,094 bbls Slick Water car	rrying 620,700# 100 mesh,
2,286,100# 40/70 and 1,430,800#	# 20/40 sand.	
Plug Back Details Including Plug Type a	and Depth(s): N/A	
Formations Encountered:	Top Depth	/ Bottom Depth
Surface:	, ор жери	
	2.6651	2.012
Gordon	2,665'	3,013'
Fifth Sandstone	3,014'	3,074'
Bayard	3,075'	3,584'
Speechley	3,585	3,903'
Balltown	3,904'	4,438'
Bradford	4,439'	4,997'
Benson	4,998'	5,238'
Alexander	5,239'	5,474'
Elk	5,475'	6,085'
Rhinestreet	6,086'	6,538'
Sycamore	6,539'	6,777'
Middlesex	6,778'	6,880'
Genundewa	6,881'	6,932'
Burket	6,933'	6,957'
Tully	6,958'	7,087'
Marcellus	7,088'	7103' TVD
ITIUI CCIIU3	.,000	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/20/2012
API#:	47-017-06046

Farm name: Ash, Allen L. & Janet S.	Operator Well No.: Webb Unit 3H Quadrangle: Salem 7.5' County: Doddridge 22 Min. 30 Sec. 32 Min. 30 Sec.			
LOCATION: Elevation: 921'				
District: McClellan Latitude: 4.816 Feet South of 39 Deg. Longitude 2.374 Feet West of 80 Deg.				
Company: Antero Resources Appalachian Corp				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	41'	41'	38 Cu. Ft Cla
Agent: CT Corporation System	13-3/8" 54.5#	530'	530'	736 Cu. Ft. Cla
Inspector: Sam Ward	9-5/8" 36#	2794'	2794'	1138 Cu. Ft. Ck
Date Permit Issued: 2/6/2012	5-1/2" 20#	13314'	13314'	3204 Cu. Ft. Cla
Date Well Work Commenced: 4/9/2012				
Date Well Work Completed: 9/22/2012	2-3/8" 4.7#	7359'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,117' TVD				
Total Measured Depth (ft): 13,314' MD, 7,064' TV	D (BHL)			
Fresh Water Depth (ft.): est. 40', 192'				
Salt Water Depth (ft.): est. 545', 1644', 1692'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 181', 244', 311', 434', 624', 68	4', 711'			
Void(s) encountered (N/Y) Depth(s) No, N/A				
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay z Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests N/A Static rock Pressure 3800 psig (surface pressure) aft Second producing formation Pay zon Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) aft	one depth (ft) ow N/A Bbl Hours er Hours de depth (ft) bw Bbl Hours	7,094' TVD (T 1/d /d s 	ata on separate s	heet)

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

1/26/12

Were core samples taken? Yes No Were cuttings caught during drilling? Yes				
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - CBL.				
This is a subsequent well. Antero only runs wireline logs on the fi	rst well on a multi-pad (Webb Unit 1H API# 47-017-	yes, please 11st		
). DETAILS OF PERFORATED INTERVALS,		
FRACTURING OR STIMULATING,	PHYSICAL CHANGE, ETC.	2). THE WELL LOG WHICH IS A SYSTEMATIC		
DETAILED GEOLOGICAL RECOR		TTOMS OF ALL FORMATIONS, INCLUDING		
COAL ENCOUNTERED BY THE WE	LLDUKE FRUM SURFACE	10 TOTAL DEI TII.		
Perforated Intervals, Fracturing, or Stimul	ating:			
Perforations: 7453'-13,249' MD (12	200 holes)			
Frac'd w/ 9,000 gals 15% HCL Aci	d, 121,324 bbls Slick Water	er carrying 658,800# 100 mesh,		
2,465,400# 40/70 and 1,413,600#	20/40 sand.			
Plug Back Details Including Plug Type an	nd Depth(s): NI/A			
Trug Buck Botains Including Trug Type and	Manager 19/A			
Formations Encountered:	Top Depth	/ Bottom Depth		
Surface:				
Gordon (est.)	2,667'	3,014'		
Fifth Sandstone (est.)	3,015'	3,066'		
Bayard (est.)	3,067'	3,591'		
Speechley (est.)	3,592'	3,897'		
Balltown (est.)	3,898'	4,438'		
Bradford (est.)	4,439'	4,999'		
Benson	5,000'	5,238'		
Alexander	5,239'	5,478'		
Elk	5,479'	6,086'		
Rhinestreet	6,087'	6,544'		
Sycamore	6,545'	6,781'		
Middlesex	6,782'	6,891'		
Genundewa	6,892'	6,938'		
Burket	6,939'	6,963'		
Tully	6,964'	7,093'		
Marcellus	7,094'	7,117' TVD		

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/26/2012	
API#:	47-033-05519	

Farm name: Posey, Larry L. and Martha V.	Operator Well	No.: RR Unit 2H	<u> </u>	
LOCATION: Elevation: 1107'	Quadrangle: C	Clarksburg		
District: Coal	County: Harris	on		
Latitude: 11,860 Feet South of 39 Deg.	20 Min.	00 Sec		
Longitude 10,385 Feet West of 80 Deg.	Min.	00 Sec	•	
Company Antero Resources Appalachian Corp				
Company: Affecto Resources Apparachian Corp Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 65.6#	40'	40'	95 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 68#	510'	510'	708 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2456'	2456'	1002 Cu. Ft. Class A
Date Permit Issued: 10/20/2011	5-1/2" 20#	15,651'	15,651'	3929 Cu. Ft. Class H
Date Well Work Commenced: 12/16/2011				
Date Well Work Completed: 04/01/2012	2-3/8" 4.7#	7491'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,120' TVD				
Total Measured Depth (ft): 15,651' MD, 6,963' TV	D (BHL)			
Fresh Water Depth (ft.): 280'				
Salt Water Depth (ft.): *None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *Pad built on deepest coal seam				
Void(s) encountered (N/Y) Depth(s) N, N/A				
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests N/A Static rock Pressure 3300 psig (surface pressure) af	zone depth (ft) 7/2 low N/A Bb N/A Bb Hours	<u>,092' TV</u> D (To ol/d l/d	ata on separate s p)	sheet)
Second producing formation Pay zon	ne depth (ft)		E	~ 0
Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow	lowBb vBbl		WY (1.37) ENVIRONMENT	DEF.
Time of open flow between initial and final tests			7	NO CER
Static rock Pressure psig (surface pressure) af		s		OF OF
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those individual that the information is true, accurate, and complete.				the information I bel
\mathcal{C}_{1} \mathcal{C}_{2}	2	. 1	1	عر SA

Signature

Were core samples taken? Yes	No X Were o	cuttings caught during drilling? Yes X	No
Were Electrical, Mechanical or Geophysi This is a subsequent well. Antero only runs wireline logs on the	ical logs recorded on this well? If	yes, please list Yes- CBL 05538). Please reference wireline logs submitted with Form V	VR-35 for Colly Unit 1H.
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE W	, PHYSICAL CHANGE, ETC. : RD OF THE TOPS AND BO	2). THE WELL LOG WHICH IS A TTOMS OF ALL FORMATIONS	SYSTEMATIO
Perforated Intervals, Fracturing, or Stimu	ılating:		
Perforations: 7,620' - 15,585' MD	(1,668 holes)		
Frac'd w/ 12,000 gals 15% HCL A	Acid, 174,925 bbls Slick Wa	ter carrying 842,000# 100 mesl	١,
3,950,600# 40/70 and 2,565,900#	# 20/40 sand.		
Plug Back Details Including Plug Type a	and Depth(s): N/A		
		D	
Formations Encountered: Surface:	Top Depth	/ Botton	n Depth
Surface.			
Big Lime est.	1,420'	1,517'	
Big Injun est.	1,518'	1,879'	
Gantz Sand est.	1,880'	1,970'	
Fifty Foot Sandstone est.	1,971'	2,140'	
Gordon est.	2,141'	2,387'	
Fifth Sandstone	2,388'	2,444'	ā
Bayard	2,445'	3,085'	
Speechley	3,086'	3,360'	
Balltown	3,361'	3,844'	
Bradford	3,845'	4,412'	
Benson	4,413'	4,760'	
Alexander	4,761'	4,979'	
Elk	4,980'	6,369'	
Sycamore	6,370'	6,666'	
Middlesex	6,667'	6,803'	
Genundewa	6,804'	6,839'	
Burket	6,840'	6,871'	
Tully	6,872'	6,998'	
Hamilton	6,999'	7,091'	
Marcellus	7,092'	7,120' TVD	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/19/2012
API#:	47-017-06044

Farm name: Ash, Allen L. & Janet S.	Operator Well	No.: Webb Unit	1H	
LOCATION: Elevation: 921'	Quadrangle: S	alem 7.5'		
Antero Resources Annaloshian Corn	County: Doddr 22 Min. 32 Min.	30 Sec.		
Company: Aftero Resources Apparachian Corp Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft Class A
Agent: CT Corporation System	13-3/8" 54.5#	531'	531'	738 Cu. Ft. Class A
Inspector: Sam Ward	9-5/8" 36#	2744'	2744'	1117 Cu. Ft. Class A
Date Permit Issued: 1/25/2012	5-1/2" 20#	12,615'	12,615'	3027 Cu. Ft. Class H
Date Well Work Commenced: 3/12/2012		Depth Set @		
Date Well Work Completed: 9/14/2012	Cement Plug	6325'		200 Cu. Ft. Class A
Verbal Plugging: N/A				
Date Permission granted on: N/A	2-3/8" 4.7#	7241'		
Rotary Cable Rig				
Total Vertical Depth (ft): 7,108' TVD				
Total Measured Depth (ft): 12,615' MD, 7,041' TV	Ď (BHL)			
Fresh Water Depth (ft.): 181', 210', 244'				
Salt Water Depth (ft.): 1,653'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 311', 434', 624', 684', 711'				
Void(s) encountered (N/Y) Depth(s) No, N/A				
Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow MCF/d Final open flow Time of open flow between initial and final tests N/A Static rock Pressure psig (surface pressure) as	zone depth (ft)_ low N/A Bl w N/A Bb Hours fter Hou one depth (ft)_ low Bb Hours	7,080' TVD (To bl/d nl/d rs bl/d bl/d	ita on separate : op)	sheet)

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

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Were core samples taken? Yes	No X We	ere cuttings caught during drilling	ng? Yes X No
Were Electrical, Mechanical or Geophys Photo Density/Compensated Neutron/Gamma Ray,	ical logs recorded on this well	If yes, please list Yes – CBL, D	ual Laterolog/Gamma Ray, and
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE W	, PHYSICAL CHANGE, ET ORD OF THE TOPS AND	C. 2). THE WELL LOG WH BOTTOMS OF ALL FOR	ICH IS A SYSTEMATIC
Perforated Intervals, Fracturing, or Stim	ulating:		
Perforations: 7347'-12,550' MD (1200 holes)		
Frac'd w/ 9,500 gals 15% HCL A	cid, 111,938 bbls Slick W	ater carrying 529,100# 1	00 mesh,
2,165,000# 40/70 and 1,251,700	# 20/40 sand.		
Plug Back Details Including Plug Type	and Depth(s): N/A		
Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			
Gordon	2,667'	3,014'	
Fifth Sandstone	3,015'	3,066'	
Bayard	3,067'	3,591'	
Speechley	3,592'	3,897'	
Balltown	3,898'	4,438'	
Bradford	4,439'	4,997'	
Benson	4,998'	5,244'	
Alexander	5,245'	5,475'	
Elk	5,476'	6,081'	
Rhinestreet	6,082'	6,535'	

6,536'

6,768'

6,878' 6,926'

6,952'

7,080'

Sycamore Middlesex

Burket

Tully Marcellus

Genundewa

6,767'

6,877' 6,925'

6,951'

7,079'

7,108' TVD

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/26/2012	
API#:	47-033-05451	

Farm name: I.L. Morris & Mike Ross, Inc.	Operator Well	No.: Reynolds	Unit 1H	
OCATION: Elevation: 1169'	_ Quadrangle: <u>V</u>	Wolf Summit		
District: Coal	County: Harris	son		
Latitude: 3,622' Feet South of 39 Deg.				
Longitude 10,920' Feet West of 80 Deg	. <u>25</u> Min.	. <u>00</u> Se	c.	
Company: Antero Resources Appalachian Corp.				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 55#	469'	469'	652 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2515'	2515'	1024 Cu. Ft. Class A
Date Permit Issued: 7/22/2010	5-1/2" 20#	15,725'	15,725'	3934 Cu. Ft. Class H
Date Well Work Commenced: 12/8/2010				
Date Well Work Completed: 5/05/2011	2-3/8" 4.7#	7114'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7077' TVD				
Total Measured Depth (ft): 15,734' MD, 6906' TVD (BHL)				
Fresh Water Depth (ft.): 40'				
Salt Water Depth (ft.): 1100'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): Pad built on deepest coal seam.				
Void(s) encountered (N/Y) Depth(s) N, N/A				}
Gas: Initial open flowMCF/d Oil: Initial open f	zone depth (ft) <u>7</u> low Bb w Bb Hours	<u>,038' TV</u> D (To 51/d 1/d	op)	·
 • · · ·		U	.70	OFFICE OF OI 2012 NOV 27
Second producing formation Pay zo		.1/.1		
Gas: Initial open flowMCF/d Oil: Initial open f Final open flowMCF/d Final open flow			•	型 2
Time of open flow between initial and final tests				型 - 0
Static rock Pressurepsig (surface pressure) at	fterHour			TO C
certify under penalty of law that I have personally examined	and am familiar	with the infor	mation submitte	d Minis document
If the attachments and that, based on my inquiry of those indi	viduals immedia	tely responsib	le for obtaining	the information I
hat the information is true, accurate, and complete.			,	H

Compensated Neutron/ Gamma Ray, Duat Latero	log/ Density Caliper/ Gamma Ray	ase list Yes, Cement Bond Log, Photo Density/
FRACTURING OR STIMULATED DETAILED GEOLOGICAL RE	OW PUT THE FOLLOWING: 1). DETING, PHYSICAL CHANGE, ETC. 2). THE CORD OF THE TOPS AND BOTTOM: E WELLBORE FROM SURFACE TO TOT	WELL LOG WHICH IS A SYSTEMATION OF ALL FORMATIONS, INCLUDING
Perforated Intervals, Fracturing, or S	timulating:	
Perforations: 7443' - 15,600'	MD (1368 holes)	
Frac'd w/5,750 gals 15% HCl	Acid, 140,397 bbls Slick Water carry	ying 644,700# 100 mesh,
2,984,000# 40/70 and 1,887,4	00# 20/40 sand.	
<u>.</u>		
Plug Back Details Including Plug Ty	pe and Depth(s): N/A	
· · · · · · · · · · · · · · · · · · ·		
Formations Encountered:	Top Depth /	Bottom Depth
Surface:		
Big Lime	1467'	1926'
Big Lime Gantz	1467' 1927'	1926' 2188'
		
Gantz	1927'	2188'
Gantz Gordon	1927' 2189'	2188' 3141'
Gantz Gordon Speechley Balltown	1927' 2189' 3142'	2188' 3141' 3350'
Gantz Gordon Speechley Balltown Benson	1927' 2189' 3142' 3351'	2188' 3141' 3350' 4484'
Gantz Gordon Speechley	1927' 2189' 3142' 3351' 4485'	2188' 3141' 3350' 4484' 4819'
Gantz Gordon Speechley Balltown Benson Alexander Elk	1927' 2189' 3142' 3351' 4485' 4820'	2188' 3141' 3350' 4484' 4819' 5025'
Gantz Gordon Speechley Balltown Benson Alexander Elk Sycamore	1927' 2189' 3142' 3351' 4485' 4820' 5026'	2188' 3141' 3350' 4484' 4819' 5025' 6832'
Gantz Gordon Speechley Balltown Benson Alexander Elk Sycamore Tully	1927' 2189' 3142' 3351' 4485' 4820' 5026' 6360' 6833'	2188' 3141' 3350' 4484' 4819' 5025' 6832' 6832'
Gantz Gordon Speechley Balltown Benson Alexander Elk Sycamore	1927' 2189' 3142' 3351' 4485' 4820' 5026'	2188' 3141' 3350' 4484' 4819' 5025' 6832'

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	08/10/2012	
API#:	47-3305344	

adrangle: Warnist Harrist Min. Min. Min. asing & Johns 20"	sonSec.	Left in well	Cement fill up Cu. Ft.
7 Min. 2 Min. asing & ubing 20"	30 Sec. 30 Sec. Used in drilling	Left in well	
7 Min. 2 Min. asing & ubing 20"	30 Sec. 30 Sec. Used in drilling	Left in well	
asing & ubing 20"	Used in drilling	Left in well	
ibing 20"	drilling		
ibing 20"	drilling		
	104'		
		104'	CmtToSurf
13 3/8"	472'	472'	458
9 5/8"	2,426'	2,426'	1009
5 1/2"	6,310'	6,310'	1728
2 3/8"		6980'	
			3 068
		ALE 30 D	542
	V.,	an said biada	
	5 1/2" 2 3/8"	5 1/2" 6,310'	5 1/2" 6,310' 6,310' 2 3/8" 6980' Alabase include additional data on separate sh

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

<u>8-15-2012</u>

Signature

ere core samples taken? Yes	No	Were cuttings caught dur	
Land Electrical Machanical or Geo	ophysical logs recorded on t	his well? If yes, please list Wes	atherford Dens/Neutron/GR/Sonic/Caliper/Dual Lat,
tudiog, Quad Neutron, GR/CCL/Temp Radial B	land Log, Spectra-Chem Tracer Log		
NOTE: IN THE AREA BEL PRACTURING OR STIMULAT DETAILED GEOLOGICAL R COAL ENCOUNTERED BY TI	TING, PHYSICAL CHAP	S AND ROTTOMS OF A	F PERFORATED INTER♥ALS, LOG WHICH IS A SYSTEMIATIO LL FORMATIONS, INCLUIDING TH.
erforated Intervals, Fracturing. or			
erforated interval 7,486 ft - 9,802	ft (350 shots). Frac'd 7 stag	es using 167 bbls 15% HCL, a	and 42,500 bbls of Slickwater carrying
33,700 lbs of 100-mesh sand, 99	6,800 lbs of 40/70 sand, a	nd 72,800 lbs of 30/50 sand.	
Plug Back Details Including Plug	Type and Depth(s): N/A		
lug Back Details including ring	Type and Departer 14/74		
			D. Grandle
Formations Encountered:	Тор	Depth /	Bottom Depth
Formations Encountered: Surface:	Тор	Depth /	Bottom Depth
	Тор	<u> Берш</u>	Bottom Depth
Surface:	Тор * 1397	1415	Bottom Depth
Surface: Little Lime		1415 1550	Bottom Depth
Surface: Little Lime Big Lime	* 1397	1415 1550 1603	Bottom Depth
Surface: Little Lime Big Lime Big Injun	* 1397 1437	1415 1550 1603 2070	Bottom Depth
Surface: Little Lime Big Lime Big Injun Fifty Foot	* 1397 1437 1550	1415 1550 1603 2070 2130	Bottom Depth
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot	* 1397 1437 1550 1986	1415 1550 1603 2070	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS	* 1397 1437 1550 1986 2081	1415 1550 1603 2070 2130	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS	* 1397 1437 1550 1986 2081 2298	1415 1550 1603 2070 2130 2354	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS Sycamore Grit	* 1397 1437 1550 1986 2081 2298 2404	1415 1550 1603 2070 2130 2354 2442	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS Sycamore Grit Genessee SH	* 1397 1437 1550 1986 2081 2298 2404 6296	1415 1550 1603 2070 2130 2354 2442 6333	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS Sycamore Grit Genessee SH Tully LS	* 1397 1437 1550 1986 2081 2298 2404 6296 6796	1415 1550 1603 2070 2130 2354 2442 6333 6810	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS Sycamore Grit Genessee SH Tully LS Hamilton	* 1397 1437 1550 1986 2081 2298 2404 6296 6796 6810	1415 1550 1603 2070 2130 2354 2442 6333 6810 6883	
Surface: Little Lime Big Lime Big Injun Fifty Foot Thirty Foot Fourth SS Fifth SS Sycamore Grit Genessee SH Tully LS	* 1397 1437 1550 1986 2081 2298 2404 6296 6796 6810 6883 7010 7100	1415 1550 1603 2070 2130 2354 2442 6333 6810 6883 7020 7100 9875 MD-TD	ATTEMATICAL DESCRIPTION OF THE PROPERTY OF THE

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-21-2012	_
API#:	47-069-00086	

Farm name: Thelma Hays OHI 5H	Operator Well No.: 833464 Quadrangle: Bethany				
LOCATION: Elevation: 1250					
Longitude 5590' Feet West of 80 Deg.	County: Ohio 10 Min. 32 Min.				
Company: Chesapeake Appalachia, L.L.C.	Casing &	Used in	Left in well	Cement fill	
Address: P.O. Box 18496	Tubing &	drilling	Left iii well	up Cu. Ft.	
Oklahoma City, OK 73154-0496	20"	104'	104'	174 Cu. Ft.	
Agent: Eric Gillespie	13 3/8"	649'	649'	696 Cu. Ft.	
Inspector: Bill Hendershot	9 5/8"	2042'	2042'	892 Cu. Ft.	
Date Permit Issued: 6-14-2011	5 1/2"	12703'	12703'	2677 Cu. Ft.	
Date Well Work Commenced: 12-24-2011					
Date Well Work Completed: 5-18-2012					
Verbal Plugging:					
Date Permission granted on:					
Rotary Cable Rig		HE			
Total Vertical Depth (ft): 6386'		1,335,531,			
Total Measured Depth (ft): 12703'		ART	2 71 - 1 - 1 - 1 - 1 - 1		
Fresh Water Depth (ft.): 200'					
Salt Water Depth (ft.): 800'		1000			
Is coal being mined in area (N/Y)? N	3		. No tan h	<u> </u>	
Coal Depths (ft.): 589'					
Void(s) encountered (N/Y) Depth(s) Y 590'					
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) af Second producing formation Pay zoo Gas: Initial open flow MCF/d Oil: Initial open flow Time of open flow MCF/d Final open flow Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) af Static rock Pressure psig (surface pressure) af	zone depth (ft) elow Blow Blow Hours ter Hours ne depth (ft) Blow Blow Blow Blow Hours	bl/d bl/d rs bl/d	ita on separate sh	eet)	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Williams
Signature

8-24-9012 Date

Were core samples taken? YesNo_N	Were cuttings caught during drilling? Yes Y
Were Electrical, Mechanical or Geophysical logs recorded on this LWD GR from 5258-12651' MD.	s well? If yes, please list
FRACTURING OR STIMULATING, PHYSICAL CHANG	WING: 1). DETAILS OF PERFORATED INTERVALS, E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC AND BOTTOMS OF ALL FORMATIONS, INCLUDING RFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
(See Attached)	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Dep Surface:	oth / Bottom Depth
(See Attached)	

Well Number and Name: 833464 Thelma Hays OHI 5H

PERFO	RATION RE	CORD		STIMULATION RECORD						
	Interval P	erforated				F	luid	Propp	ing Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
4/12/2012	12,149	12,571	5/9/2012	12,149	12,571	Slk wtr	7,870	Sand	443,880	74.0
5/9/2012	11,484	12,055	5/10/2012	11,484	12,055	Slk wtr	10,967	Sand	600,380	76.0
5/10/2012	10,819	11,390	5/13/2012	10,819	11,390	Slk wtr	10,181	Sand	598,900	80.0
5/13/2012	10,154	10,725	5/16/2012	10,154	10,725	Slk wtr	11,250	Sand	598,120	80.0
5/16/2012	9,489	10,060	5/16/2012	9,489	10,060	Slk wtr	9,913	Sand	602,960	78.0
5/16/2012	8,824	9,395	5/17/2012	8,824	9,395	Slk wtr	9,893	Sand	597,760	80.0
5/17/2012	8,159	8,730	5/18/2012	8,159	8,730	Slk wtr	9,909	Sand	596,360	80.0
5/18/2012	7,494	8,065	5/18/2012	7,494	8,065	Slk wtr	9,866	Sand	594,120	80.0
5/18/2012	6,829	7,400	5/18/2012	6,829	7,400	Slk wtr	9,785	Sand	598,200	80.0
			-					 		
-								 		
										
								<u> </u>		_
								 	-	
								<u> </u>		

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 6386 ft TVD @ 6802 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SH	0	0	300	300
SS/LS	300	300	589	589
PITTSBURG COAL	589	589	595	595
LS/SH/SS	595	595	790	790
SS	790	790	1510	1510
SH/SS	1510	1510	1620	1620
BIG LIME (LS)	1620	1620	1646	1646
BIG INJUN (SS)	1646	1646	1920	1920
SHALE	1920	1920	6371	6181
GENESEO (SH)	6371	6181	6390	6196
TULLY (LS)	6390	6196	6445	6236
HAMILTON (SH)	6445	6236	6640	6349
MARCELLUS (SH)	6640	6349		
TD OF LATERAL			12651	6206

Farm name: Nick Ballato BRK 3H

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

Operator Well No.: 637878

DATE:	8-16-2012	V
API#:	47-009-00100	

LOCATION: Elevation: 970'	_ Quadrangle:	Steubenville East	<u> </u>	······································	
District: Cross Creek	County: Broo	ke			
Latitude: 6,580' Feet South of 40 Deg.	20 Mir		c.		
Longitude 8.330 Feet West of 80 Deg	. <u>32</u> Mir	n. <u>30</u> Se	c.		
Company: Chesapeake Appalachia, L.L.C.					•
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Oklahoma City, OK 73154-0496	20"	114'	114'	Driven	
Agent: Eric Gillespie	13 3/8"	381'	381'	465 Cu. Ft.	
Inspector: Bill Hendershot	9 5/8"	1310'	1310'	583 Cu. Ft.	
Date Permit Issued: 6-16-2011	5 1/2"	9943'	9943'	2357 Cu. Ft.	
Date Well Work Commenced: 9-10-2011					
Date Well Work Completed: 3-14-2012					
Verbal Plugging:					
Date Permission granted on:					
Rotary Cable Rig	<u> </u>			+	
	,		 	-	
Total Vertical Depth (11).	,			-	
Total Measured Depth (ft): 9943'	 	<u> </u>			
Fresh Water Depth (ft.): 50', 80', 300'				-	١.
Salt Water Depth (ft.): 790'					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 536'					
Void(s) encountered (N/Y) Depth(s) N]
OPEN FLOW DATA (If more than two producing formation Producing formation Pay Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow	zone depth (ft)		ata on separate s	sheet)	
Time of open flow between initial and final tests ³⁴	W Hours		go sa	en e la procesión de sed	to 4 - 145
Static rock Pressure 3.551* psig (surface pressure) a			; ₹ * *-		Ty.
Second producing formation Pay 20	ne donth (A)		*		,
Gas: Initial open flow MCF/d Oil: Initial open f	• • • • • • • • • • • • • • • • • • • •	bl/d		AUG 17 2012	
Final open flow MCF/d Final open flow		ol/d	* E		•
Time of open flow between initial and final tests		3	€,	e a escesión de tractiones en	
	fter Hou		**** * * * * * * * * * * * * * * * * *	化油油凝胶的医油油混合物 化氯化	***

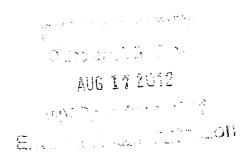
Were core samples taken? YesN	lo N	Were cuttings caught	t during drilling? Yes Y	No
Were Electrical, Mechanical or Geophysic open hole logs run from 0-5541' MD; LWD GR from 4833	cal logs recorded on this w -9943' MD.	ell? If yes, please lis	t GR, neutron, density, a	and resistivity
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECORCOAL ENCOUNTERED BY THE WE	PHYSICAL CHANGE, RD OF THE TOPS AN	ETC. 2). THE WEL ID BOTTOMS OF	L LOG WHICH IS A S' ALL FORMATIONS,	YSTEMATIC
Perforated Intervals, Fracturing, or Stimul	ating:			
(See Attached)				
Plug Back Details Including Plug Type an	d Depth(s): cement pl	ug @ 4750' - 55	537'	
		·		
Formations Encountered: Surface:	Top Depth	/	Bottom 1	<u>Depth</u>
(See Attached)				
			<u> </u>	
			<u></u>	
			2980) (80° to the control of the con	v vinding at a
			-	

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Well Number and Name: 637878 Nick Ballato BRK 3H

PERFOR	RATION RE	CORD		STIMULATION RECORD						
	Interval F	Perforated				F	luid		ing Agen t	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
11/20/2011	9,152	9,534	3/6/2012	9,152	9,534	Slk wtr	11,557	Sand	570,093	80
3/6/2012	8,673	9,056	3/7/2012	8,673	9,056	Slk wtr	7,604	Sand	565,940	71.3
3/7/2012	8,196	8,579	3/8/2012	8,196	8,579	Slk wtr	9,678	Sand	509,307	76
3/8/2012	7,720	8,107	3/10/2012	7,720	8,107	Sik wtr	9,724	Sand	571,060	80
3/10/2012	7,243	7,627	3/11/2012	7,243	7,627	Slk wtr	9,945	Sand	567,080	77.2
3/11/2012	6,766	7,150	3/12/2012	6,766	7,150	Sik wtr	11,257	Sand	570,740	80
3/12/2012	6,289	6,673	3/13/2012	6,289	6,673	Slk wtr	11,856	Sand	591,560	77
3/13/2012	5,812	6,196	3/14/2012	5,812	6,196	Slk wtr	12,226	Sand	570,720	75
										l



VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
SH/LS/SS	0	536
PITTSBURG COAL	536	550
SS/SH	550	850
SS	850	958
BIG LIME (LS)	958	1076
BIG INJUN (SS)	1076	1244
SHALE	1244	5318
GENESEO (SH)	5318	5333
TULLY (LS)	5333	5385
HAMILTON (SH)	5385	5460
MARCELLUS (SH)	5460	5525
ONONDAGA (LS)	5525	
TD OF PILOT HOLE		5541

LATERAL SIDETRACK WELLBORE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SH/LS/SS	0	0	536	536
PITTSBURG COAL	536	536	550	550
SS/SH	550	550	850	850
SS	850	850	958	958
BIG LIME (LS)	958	958	1076	1076
BIG INJUN (SS)	1076	1076	1244	1244
SHALE	1244	1244	5358	5322
GENESEO (SH)	5358	5322	5376	5337
TULLY (LS)	5376	5337	5451	5389
HAMILTON (SH)	5451	5389	5604	5462
MARCELLUS (SH)	5604	5462		
TD OF LATERAL			9943	5463 AUG 17 20

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State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-15-2012	V	
API #:	47-009-00099		

OG 4 (TVO) 1	Operator Well No.: 637877							
OCATION: Elevation: 970'	_ Quadrangle: _	Steubenville East						
District: Cross Creek	County: Brooke							
Latitude: 6,580' Feet South of 40 Deg.								
Longitude 8.350' Feet West of 80 Deg	. <u>32</u> Min	. <u>30</u> Sec	.					
Company: Chesapeake Appalachia, L.L.C.								
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.				
Oklahoma City, OK 73154-0496	20"	110'	110'	381 Cu. Ft.				
Agent: Eric Gillespie	13 3/8"	355'	355'	421 Cu. Ft.				
Inspector: Bill Hendershot	9 5/8"	1400'	1400'	617 Cu. Ft.				
Date Permit Issued: 6-16-2011	5 1/2"	10302'	10302'	2442 Cu. Ft				
Date Well Work Commenced: 10-1-2011								
Date Well Work Completed: 3-15-2012								
Verbal Plugging:								
Date Permission granted on:								
Rotary Cable Rig								
Total Vertical Depth (ft): 5502'								
Total Measured Depth (ft): 10302'								
Fresh Water Depth (ft.): 50', 80', 300'								
Salt Water Depth (ft.): 790'								
Is coal being mined in area (N/Y)? N								
Coal Depths (ft.): 536'								
Void(s) encountered (N/Y) Depth(s) N								

Final open flow 260 Final open flow 1,467* MCF/d Time of open flow between initial and final tests 64 Hours *Calculated Static rock Pressure 3,550* _psig (surface pressure) after _ Oard ara \$400 Second producing formation Pay zone depth (ft) Gas: Initial open flow____MCF/d Oil: Initial open flow____ Bbl/d AUG 17 2012 Final open flow_____ _MCF/d Final open flow _____ Bbl/d Time of open flow between initial and final tests Static rock Pressure____ _psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marken L'illians
Signature

8-16-2012 Date

Were core samples taken? Yes	No.N	Were cuttings caught during drilling? Yes	YNo
Were Electrical, Mechanical or Geophys LWD GR from 4953-10302' MD.	cal logs recorded on this	s well? If yes, please list	
FRACTURING OR STIMULATING	PHYSICAL CHANG RD OF THE TOPS	VING: 1). DETAILS OF PERFORATE E, ETC. 2). THE WELL LOG WHICH IS AND BOTTOMS OF ALL FORMATION RFACE TO TOTAL DEPTH.	ASYSTEMATIC
Perforated Intervals, Fracturing, or Stimu	lating:		
(See Attached)			
Plug Back Details Including Plug Type a	nd Depth(s):		
Formations Encountered: Surface:	Top Dep	th / Bott	om Depth
(See Attached)			
		great to all the	er english e e te d
		₩ (A <u></u> ## (A	<u> </u>

AUG 17 2012

Enm on Loss Lands 2000

Well Number and Name: 637877 Nick Ballato BRK 1H

PERFO	DRATION RE	RATION RECORD STIMULATION R				STIMULATION RECORD					
	Interval Pe	erforated				Fit	uid	Proppir	ng Agent	Average	
Date	From	То	Date	Interval T	reated	Туре	Amount	Туре	Amount	Injection	
11/20/2011	9,754	10,162	3/6/2012	9,754	10,162	Slk wtr	10,233	Sand	574,860	80	
3/6/2012	9,279	9,685	3/7/2012	9,279	9,685	Sik wtr	9,721	Sand	568,560	80	
3/7/2012	8,803	9,210	3/8/2012	8,803	9,210	Sik wtr	9,937	Sand	575,000	80	
3/8/2012	8,328	8,734	3/9/2012	8,328	8,734	Sik wtr	9,792	Sand	565,880	80	
3/9/2012	7,852	8,259	3/9/2012	7,852	8,259	Sik wtr	12,012	Sand	569,600	77	
3/10/2012	7,377	7,783	3/10/2012	7,377	7,783	Sik wtr	11,307	Sand	571,720	77	
3/10/2012	6,901	7,308	3/11/2012	6,901	7,308	Slk wtr	9,642	Sand	571,900	80	
3/11/2012	6,426	6,832	3/12/2012	6,426	6,832	Sik wtr	11,667	Sand	568,880	77	
3/12/2012	5,913	6,357	3/15/2012	5,913	6,357	Sik wtr	29,893	Sand	683,740	75.5	
			 					<u> </u>			

AUG 17 2012

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5502 ft TVD @ 6271 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SH/LS/SS	0	0	536	536
PITTSBURG COAL	536	536	550	550
SS/SH	550	550	850	850
SS	850	850	958	958
BIG LIME (LS)	958	958	1076	1076
BIG INJUN (SS)	1076	1076	1244	1244
SHALE	1244	1244	5519	5320
GENESEO (SH)	5519	5320	5538	5334
TULLY (LS)	5538	5334	5623	5388
HAMILTON (SH)	5623	5388	5794	5459
MARCELLUS (SH)	5794	5459		
TD OF LATERAL			10302	5461

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State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

~		V
DATE:	8-7-2012	
API#:	47-069-00087	

Farm name: Alice Edge OHI 1H	Operator We	Operator Well No.: 833346						
LOCATION: Elevation: 1220'	Quadrangle:	Quadrangle: Valley Grove						
District: Liberty	County: Ohio	County: Ohio						
	g. 07 Mir		 с.					
Longitude 9130 Feet West of 80 De	eg. 32 Mir	n. 30 Se	c.					
Company: Chesapeake Appalachia, L.L.C.								
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.				
Oklahoma City, OK 73154-0496	20"	100'	100'	392 Cu. Ft.				
Agent: Eric Gillespie	13 3/8"	655'	655'	661 Cu. Ft.				
Inspector: Bill Hendershot	9 5/8"	2056'	2056'	931 Cu. Ft.				
Date Permit Issued: 5-31-2011	5 1/2"	11466'	11466'	2939 Cu. Ft.				
Date Well Work Commenced: 10-31-2011								
Date Well Work Completed: 4-20-2012								
Verbal Plugging:								
Date Permission granted on:								
Rotary Cable Rig								
Total Vertical Depth (ft): 6401'								
Total Measured Depth (ft): 11466'								
Fresh Water Depth (ft.): 63'								
Salt Water Depth (ft.): 1155'								
Is coal being mined in area (N/Y)? Y								
Coal Depths (ft.): 580', 1030', 1240'								
Void(s) encountered (N/Y) Depth(s) N								
•								
OPEN FLOW DATA (If more than two producing formations)			lata on separates	APPE .				
Producing formation Marcellus Pa	y zone depth (ft)	6,970' - 11,357'	REVE	1695				
Gas: Initial open flowMCF/d Oil: Initial oper	n flowB	Bbl/d	Office of O	11 St Calcaga				
Final open flow 1,793* MCF/d Final open fl	low 202 Bl	bl/d	Olling	12012 10				
Time of open flow between initial and final tests 64		s * Calculated	AUG	19				
Static rock Pressure 4.147* psig (surface pressure)		ırs	NAM Depe	182012 B extment of				
Second producing formation Pay	zone depth (ft)	,	· · · · · · · · · · · · · · · · · · ·	THE BUILDING				
Gas: Initial open flow MCF/d Oil: Initial open	• • •	Bbl/d	ZLIAII. Marie					
Final open flow MCF/d Final open fl		bl/d						
Time of open flow between initial and final tests								

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marloy (cillians)
Signature

Static rock Pressure _____psig (surface pressure) after _____Hours

8/13/2012 Date و کاری

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, de to 2050; LWD GR from 5950 NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORAT FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIC COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH. Perforated Intervals, Fracturing, or Stimulating: (See Attached) Plug Back Details Including Plug Type and Depth(s):	ED INTERVALS,
FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIC COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH. Perforated Intervals, Fracturing, or Stimulating: (See Attached)	SASYSTEMATIC
(See Attached)	
Plug Back Details Including Plug Type and Depth(s):	
Plug Back Details Including Plug Type and Depth(s):	
Plug Back Details Including Plug Type and Depth(s):	
Plug Back Details Including Plug Type and Depth(s):	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Depth / Bo Surface:	ottom Depth
(see attached)	
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Well Number and Name: 833346 Alice Edge OHI 1H

PERFO	PERFORATION RECORD			STIMULATION RECORD						
	Interval P	erforated				Fluid		Propping Agent		Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
1/26/2012	10,975	11,357	4/16/2012	10,975	11,357	Sik wtr	11,877	Sand	664,900	79
4/16/2012	10,303	10,862	4/16/2012	10,303	10,862	Sik wtr	11,953	Sand	661,500	80
4/16/2012	9,637	10,195	4/17/2012	9,637	10,195	Sik wtr	12,070	Sand	665,520	80
4/17/2012	8,970	9,529	4/19/2012	8,970	9,529	Slk wtr	11,878	Sand	659,640	80
4/19/2012	8,310	8,862	4/19/2012	8,310	8,862	Slk wtr	13,012	Sand	664, 100	80
4/19/2012	7,637	8,195	4/20/2012	7,637	8,195	Slk wtr	12,644	Sand	660,790	80
4/20/2012	6,970	7,529	4/20/2012	6,970	7,529	Slk wtr	11,574	Sand	660, OOO	80
	•									
				· · · · · · · · · · · · · · · · · · ·						

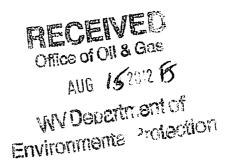
Office of Oil & Gas

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Environments rejection

LATERAL WELLBORE	(no vertical	pilot hole assoc	ciated with this v	well)				
Maximum TVD of wellbore:	6401 ft TVD @ 8203 ft MD							
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)				
SHALE / LS	0	0	580	580				
PITTSBURGH COAL	580	580	605	605				
SHALE	605	605	1030	1030				
SS/SHALE/COAL	1030	1030	1090	1090				
SHALE	1090	1090	1180	1180				
SS/SHALE	1180	1180	1240	1240				
SHALE/COAL	1240	1240	1300	1300				
SHALE	1300	1300	1480	1480				
SS	1480	1480	1540	1540				
SHALE / SILT	1540	1540	1600	1600				
LIMESTONE	1600	1600	1660	1660				
SILT	1660	1660	1750	1750				
BIG INJUN	1750	1750	1957	1957				
SHALE / SILT	1957	1957	6511	6211				
GENESEO	6511	6211	6532	6228				
TULLY	6532	6228	6580	6266				
HAMILTON	6580	6266	6762	6367				
MARCELLUS	6762	6367						
End of Well			11466	6366				



State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-1 3-2012
API#:	47-069-00102

Farm name: Alice Edge OHI 8H Operator Well No.: 833043 LOCATION: Elevation: 1220' Quadrangle: Valley Grove County: Ohio District: Liberty Latitude: 5260' Feet South of 40 Deg. 07 Min. 30 Sec. Min. 30 Longitude 9160' Deg. 32 Feet West of 80 Sec. Chesapeake Appalachia, L.L.C. Company: Cement fill Used in Left in well Casing & P.O. Box 18496 Address: **Tubing** drilling up Cu. Ft. Oklahoma City, OK 73154-0496 20" 100' 426 Cu. Ft. 100' Eric Gillespie 746 Cu. Ft. 13 3/8" 658' 658' Agent: Inspector: Bill Hendershot 915 Cu. Ft. 9 5/8" 2114' 2114' Date Permit Issued: 11-15-2011 5 1/2" 11348' 11348' 2936 Cu. Ft. Date Well Work Commenced: 11-23-2011 4-20-2012 Date Well Work Completed: Verbal Plugging: Date Permission granted on: Rotary 🗸 Cable Rig Total Vertical Depth (ft): 6462' Total Measured Depth (ft): 11348' Fresh Water Depth (ft.): 63' 1155' Salt Water Depth (ft.): Is coal being mined in area (N/Y)? Y Coal Depths (ft.): 580', 1030, 1240 Void(s) encountered (N/Y) Depth(s) N OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Pay zone depth (ft) 6,844' - 11,211' Producing formation Marcellus MCF/d Oil: Initial open flow Bbl/d Gas: Initial open flow RECEIVED Final open flow 155 Final open flow 1,813 MCF/d Bbl/d Time of open flow between initial and final tests 41 Hours Office of Oil & Gas Static rock Pressure 4,200 psig (surface pressure) after Hours AUG 15 2012 5 Pay zone depth (ft) Second producing formation MV Decatment of Gas: Initial open flow_____MCF/d Oil: Initial open flow____ Bbl/d Environmental Prote Final open flow _____Bbl/d Hours Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Manley Williams
Signature

8/13/2012 Date

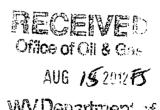
Vere core samples taken? YesNo_X	Were cuttings caught during drilling? Yes X No
Vere Electrical, Mechanical or Geophysical logs recorded or	n this well? If yes, please list LWD GR from 5850° to TD
FRACTURING OR STIMULATING, PHYSICAL CHA	LOWING: 1). DETAILS OF PERFORATED INTERVALS, ANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC PS AND BOTTOMS OF ALL FORMATIONS, INCLUDING ISURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
See Attached)	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Surface:	Depth / Bottom Depth
See attached)	
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Well Number and Name: 833043 Alice Edge OHI 8H

RATION RE	CORD	STIMULATION RECORD							
Interval P	erforated				Fluid		Propping Agent		Average
From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
10,844	11,211	4/13/2012	10,844	11,211	Slk wtr	9,270	Sand		77
10,357	10,791	4/15/2012	10,357	10,791	Sik wtr	11,338	Sand	491,140	79
9,855	10,289	4/15/2012	9,855	10,289	Slk wtr	10,132	Sand		80
9,354	9,787	4/16/2012	9,354	9,787	Slk wtr	9,855	Sand		78
8,852	9,285	4/18/2012	8,852	9,285	Slk wtr	9,543	Sand		80
8,350	8,783	4/18/2012	8,350	8,783	Slk wtr	9,341	Sand		80
7,848	8,282	4/18/2012	7,848	8,282	Sik wtr	9,234	Sand		80
7,347	7,780	4/19/2012	7,347	7,780	Sik wtr	8,980	Sand		80
6,844	7,278	4/20/2012	6,844	7,278	Slk wtr	9,349	Sand	490,460	80
	•								
		ļ							 -
	Interval P From 10,844 10,357 9,855 9,354 8,852 8,350 7,848 7,347	10,844 11,211 10,357 10,791 9,855 10,289 9,354 9,787 8,852 9,285 8,350 8,783 7,848 8,282 7,347 7,780	Interval Perforated From To Date 10,844 11,211 4/13/2012 10,357 10,791 4/15/2012 9,855 10,289 4/15/2012 9,354 9,787 4/16/2012 8,852 9,285 4/18/2012 8,350 8,783 4/18/2012 7,848 8,282 4/18/2012 7,347 7,780 4/19/2012 10,845 10,855	Interval Perforated From To Date Interval 10,844 11,211 4/13/2012 10,844 10,357 10,791 4/15/2012 10,357 9,855 10,289 4/15/2012 9,855 9,354 9,787 4/16/2012 9,354 8,852 9,285 4/18/2012 8,852 8,350 8,783 4/18/2012 8,350 7,848 8,282 4/18/2012 7,848 7,347 7,780 4/19/2012 7,347	Interval Perforated				

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Environmental Protestion

LATERAL WELLBORE	(no vertical	pilot hole with t	his well)	
Maximum TVD of wellbore:	6462 ft T	VD @ 11302 ft M	D	
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE / LS	0	0	580	580
PITTSBURGH COAL	580	580	605	605
SHALE	605	605	1030	1030
SS/SHALE/COAL	1030	1030	1090	1090
SHALE	1090	1090	1180	1180
SS/SHALE	1180	1180	1240	1240
SHALE/COAL	1240	1240	1300	1300
SHALE	1300	1300	1480	1480
SS	1480	1480	1540	1540
SHALE / SILT	1540	1540	1600	1600
LIMESTONE	1600	1600	1660	1660
SILT	1660	1660	1750	1750
BIG INJUN	1750	1750	1957	1957
SHALE / SILT	1957	1957	6241	6200
GENESEO	6241	6200	6275	6225
TULLY	6275	6225	6331	6264
HAMILTON	6331	6264	6552	6369
MARCELLUS	6552	6369		
			11348	6462



WV Department of Environmenta Protection

State of West Virginia Department of Environmental Protection Office of Oil and Gas

DATE:	7-31-2012	_
	47-077-00566	

	wen	Sperator	s Kep	ortor wen w	OI K		
Farm name: Dennis Hart 3H			Oper	ator Well No.: <u>8</u>	32773	4	
LOCATION: Elevation: 1735			Quad	lrangle: Morgant	own North	70607	0.52
District: Valley Point			Coun	nty: Preston			9 5 pm
Latitude: 2137	Feet South of 39	Deg.	35	Min. 00	Sec.		
Longitude 7701	Feet West of 79	Deg.	45	Min. 00	Sec.		

Chesapeake Appalachia, L.L.C.

Company: Chesapeake Apparachia, L.D.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	120'	120'	Driven
Agent: Eric Gillespie	13 3/8"	397'	397'	476 Cu. Ft.
Inspector: Bryan Harris	9 5/8"	3366'	3366'	213 Cu. Ft.
Date Permit Issued: 1/25/2011	5 1/2"	13884'	13884'	2619 Cu. Ft.
Date Well Work Commenced: 6/18/2011				
Date Well Work Completed: 1/26/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 7774' (cament plug @6625'-7200')				
Total Measured Depth (ft): 13885'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 80', 180'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more th	an two producing formations ple	ase include additional	data on separate sheet)
Producing formation Marcellus	Pay zone d	epth (ft) 7,876' - 13,745'	
Gas: Initial open flow	MCF/d Oil: Initial open flow		
Final open flow 2,268*	MCF/d Final open flow 0	Bbl/d	
Time of open flow between	n initial and final tests 50	Hours *Calculated	
Static rock Pressure 4,969*	_psig (surface pressure) after	Hours	
Second producing formation_	Pay zone dep	th (ft)	
Gas: Initial open flow	MCF/d Oil: Initial open flow	Bbl/d	
Final open flow	MCF/d Final open flow	Bbl/d	
Time of open flow between	n initial and final tests	Hours	
Static rock Pressure	psig (surface pressure) after	Hours	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Were core samples taken? YesNo_N	Were cuttings caught during drilling? Yes Y NoNo
Were Electrical, Mechanical or Geophysical logs reco	orded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-7804' MD; LWD GR from 6850-13885' MD.	
FRACTURING OR STIMULATING, PHYSICA DETAILED GEOLOGICAL RECORD OF THE COAL ENCOUNTERED BY THE WELLBORE	E FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, AL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC HE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
Plug Back Details Including Plug Type and Depth(s)	Cement plug @ 6625'- 7200'
Formations Encountered: Surface:	Top Depth / Bottom Depth

addillibra---

Well Number and Name: 832773 Dennis Hart 3H

PERFO	PERFORATION RECORD			STIMULATION RECORD						
	Interval P	erforated				F	luid		ing Agerat	Average
Date	From	To	Date	Interval	Treated	Type		Туре	Amount	Injection
12/14/2011	13,363	13,745	1/18/2012	13,363	13,745	Slk wtr	9,920	Sand	573,379	66
1/18/2012	12,910	13,275	1/19/2012	12,910	13,275	Slk wtr	9,709	Sand	572,590	70
1/19/2012	12,453	12,817	1/20/2012	12,453	12,817	Slk wtr	11,513	Sand	574,717	84
1/20/2012	11,996	12,360	1/20/2012	11,996	12,360	Slk wtr	10,942	Sand	575,837	74
1/20/2012	11,539	11,903	1/21/2012	11,539	11,903	Slk wtr	11,868	Sand	575,272	85
1/21/2012	11,082	11,446	1/22/2012	11,082	11,446	Slk wtr	10,357	Sand	554,563	78
1/22/2012	10,625	10,989	1/23/2012	10,625	10,989	Slk wtr	10,784	Sand	573,500	84
1/23/2012	10,168	10,522	1/23/2012	10,168	10,522	Slk wtr	10,493	Sand	569,333	82
1/23/2012	9,711	10,082	1/24/2012	9,711	10,082	Sik wtr	11,737	Sand	552,196	78
1/24/2012	9,254	9,622	1/24/2012	9,254	9,622	Slk wtr	13,402	Sand	500,775	81
1/24/2012	8,797	9,161	1/25/2012	8,797	9,161	Slk wtr	12,821	Sand	572,098	78
1/25/2012	8,340	8,704	1/25/2012	8,340	8,704	Sik wtr	12,686	Sand	573,046	80
1/25/2012	7,876	8,247	1/26/2012	7,876	8,247	Slk wtr	13,286	Sand	581,176	86
							<u> </u> -	 	 	-
										

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VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
SHALE/LS	0	80
SHALE/LS/COAL	80	200
SHALE/LS	200	250
SHALE/SS	250	400
SHALE/LS/COAL	400	450
LS/SS	450	550
SS/SHALE	550	740
SHALE	740	840
LS	840	990
SS/SILT	990	2290
SHALE/SILT/SS	2290	7183
GENESEO	7183	7209
TULLY	7209	7289
HAMILTON	7289	7539
MARCELLUS	7539	7634
ONONDAGA (LS)	7634	
TD OF PILOT HOLE		7774

LATERAL SIDETRACK WELLBORE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE/LS	0	0	80	80
SHALE/LS/COAL	80	80	200	200
SHALE/LS	200	200	250	250
SHALE/SS	250	250	400	400
SHALE/COAL	400	400	450	450
LS/SS	450	450	550	550
SS/SHALE	550	550	740	740
SHALE	740	740	840	840
LS	840	840	990	990
SS/SILT	990	990	2290	2290
SHALE/SILT/SS	2290	2290	7188	7179
GENESEO	7188	7179	7220	7210
TULLY	7220	7210	7299	7285
HAMILTON	7299	7285	7680	7528
MARCELLUS	7680	7528		
TD OF LATERAL			13885	7645

7/30/2012

State of West Virginia Division of Environmental Protection Section of Oil and Gas

API # 47-049-02181

Well Operator's Report of Well Work

Farm name:	Donna	Operator W	/ell No: #4	Н		
Location:	Elevation: 1,171	Quadrangle: Mannington				
	District: Lincoln	County: Mar	rion			
	Latitude: 39 ° 34' 27.6"					
	Longitude: 80 ° 17' 40.8"		Casing &	Used in	Left in	Cement Fill Up Cu. Ft
Company:	Eastern American Energy Corporation 501 56 th Street Charleston, WV 25304		Tubing 20"	Well 40'	Well 40'	40 cu ft.
Agent: Rodne	y A. Winters		13 3/8"	741'	741'	753 cu ft
Inspector:			9 5/8"	3,957	3,957	1,673 cu ft
Permit Issued:	9/1/2011 nmenced: 10/17/2011		5 1/2"	11,105	11,105	1,488 cu ft
	npleted: 7/30/2012		2-3/8"	8,204	8,204	Tubing head
Permission gra Rotary Total Depth (f	anted on: y_X_ Cable Rig t): 11,050'				CE	VED
Salt-water dep					ce of Oil	
_	nined in the area? (Y/N): N t): 617'			\ \\\ \	AUG 10	2012

FORMATION COLOR, HARD OR SOFT	TOP FEET	BOTTOM FEET
Top Fill	0	40
Sand & Shale	40	1150
Maxton	1700	1762
Little Lime	1906	1920
Pencil Cave	1920	1938
Big Lime	1938	2030
Big Injun	2030	2138
50 Foot	2632	2683
0 Foot	2850	2890
Gordon	2923	2988
Fifth	3101	3119
Benson	4696	4708
Alexander	5624	5648
Geneseo	7402	7450
Tully	7450	7490
Hamilton	7490	7533
Upper Marcellus	7533	7618
Cherry Valley	7618	7623
Lower Marcellus	7623	7688
Onondaga	7688	7703

AUG 10 2012

WV Department of

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-15-2012	٧
API #:	47-069-00069	

District: Triadelphia		County: Ohio			
Latitude: 8650'	Feet South of 40 Deg	g. 05 Mir	n. 00Sec	······································	
Longitude 14610	Feet West of 80 De	g. <u>30</u> Mir	n. 00 Sec	2.	
Company: Chesapeak	e Appalachia, L.L.C.				
Address: P.O. Box 18496		Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73	20"	100'	100'	Driven	
Agent: Eric Gillespie	13 3/8"	735'	735'	830 Cu. Ft.	
Inspector: Bill Hen	9 5/8"	2202'	2202'	976 Cu. Ft.	
Date Permit Issued:	5 1/2"	12950'	12950'	2770 Cu. Ft.	
Date Well Work Com	nenced: 2/1/2011				
Date Well Work Comp	014.41004.4				
Verbal Plugging:					
Date Permission grant	ed on:				
Rotary Cable	Rig			<u> </u>	
Total Vertical Depth	(ft): 6703' (cement plug @ 4898' - 6	647'			
Total Measured Dept	th (ft): 12960'				
Fresh Water Depth (_		
Salt Water Depth (ft.	44501 40001				
Is coal being mined in			_		
Coal Depths (ft.): 685					
Void(s) encountered (N/Y) Depth(s) N				

Final open flow 61 Final open flow 2,491* MCF/d Time of open flow between initial and final tests 69 Hours *Calculated _psig (surface pressure) after _____ Static rock Pressure 4,343* Aug 1 6 2012 WV Department of Pay zone depth (ft) Second producing formation_ MCF/d Oil: Initial open flow____ Bbl/d Gas: Initial open flow____ Bbl/d Final open flow ____ Final open flow_____ MCF/d Time of open flow between initial and final tests Hours Static rock Pressure _____psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Williams

8-15-2012 Date

Were Electrical, Mechanical or Geophysical logs recorded on thi microresistivity, sonic NOTE: IN THE AREA BELOW PUT THE FOLLOW FRACTURING OR STIMULATING, PHYSICAL CHANG DETAILED GEOLOGICAL RECORD OF THE TOPS COAL ENCOUNTERED BY THE WELLBORE FROM SU	WING: 1). DETAILS OF PERFORATED INTERVALS E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATION AND BOTTOMS OF ALL FORMATIONS, INCLUDING
FRACTURING OR STIMULATING, PHYSICAL CHANG DETAILED GEOLOGICAL RECORD OF THE TOPS	E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATION BOTTOMS OF ALL FORMATIONS, INCLUDING
Perforated Intervals, Fracturing, or Stimulating:	
(See Attached)	
Plug Back Details Including Plug Type and Depth(s): Cemen	t plug@ 4898' - 6647'
Formations Encountered: Top De Surface:	pth / Bottom Depth
(see attached pages)	·
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	RECEIVED Office of Oil & Gas
	AUG 1 6 2012

VVV Department of Environmental Protection

Well Name and Number: Roy Ferrell 8H (832804)

PERFO	RATION RE	CORD	STII				TIMULATION RECORD			
	Interval P	erforated				FI	uid	Proppin	ng Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
7/29/2011	12,319	12,641	7/29/2011	12,319	12,641	Slk Wtr	10,384	Sand	481,379	89.0
7/30/2011	11,919	12,241	7/30/2011	11,919	12,241	Slk Wtr	9,963	Sand	480,019	87.0
7/31/2011	11,519	11,841	7/31/2011	11,519	11,841	Slk Wtr	9,483	Sand	479,448	86.0
8/3/2011	11,119	11,441	8/3/2011	11,119	11,441	Slk Wtr	9,816	Sand	485,615	86.0
8/5/2011	10,680	11,041	8/5/2011	10,680	11,041	Slk Wtr	10,603	Sand	485,930	87.0
8/6/2011	10,319	10,641	8/6/2011	10,319	10,641	Slk Wtr	9,715	Sand	479,681	84.0
8/6/2011	9,919	10,241	8/6/2011	9,919	10,241	Slk Wtr	9,241	Sand	481,624	86.0
8/7/2011	9,519	9,841	8/7/2011	9,519	9,841	Slk Wtr	9,142	Sand	484,784	85.0
8/8/2011	9,119	9,441	8/8/2011	9,119	9,441	Slk Wtr	11,856	Sand	485,100	72.0
8/9/2011	8,719	9,041	8/9/2011	8,719	9,041	Slk Wtr	12,551	Sand	480,985	75.0
8/10/2011	8,319	8,641	8/10/2011	8,319	8,641	Slk Wtr	8,121	Sand	484,648	86.0
8/11/2011	7,919	8,241	8/11/2011	7,919	8,241	Slk Wtr	9,011	Sand	482,697	85.0
8/13/2011	7,515	7,837	8/13/2011	7,515	7,837	Slk Wtr	11,800	Sand	487,369	85.0
8/14/2011	7,119	7,441	8/14/2011	7,119	7,441	Slk Wtr	9,198	Sand	483,749	87.0
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Formation/Lithology	Тор	Top Depth,	Bottom	Bottom
	Depth,	TVD (ft)	Depth, MD	Depth, TVD
	MD (ft)		(ft)	(ft)
SS	0	0	120	120
SHALE	120	120	270	270
SHALE/SS/LS	270	270	330	330
SHALE	330	330	430	430
SHALE/LS	430	430	685	685
PITTSBURGH COAL	685	685	690	690
SHALE/LS	690	690	740	740
SS	740	740	770	770
SHALE	770	770	970	970
LS	970	970	1010	1010
SHALE	1010	1010	1160	1160
SS	1160	1160	1220	1220
SHALE	1220	1220	1430	1430
SS	1430	1430	1490	1490
SHALE	1490	1490	1566	1566
MAXTON	1566	1566	1640	1640
SHALE	1640	1640	1820	1820
BIG INJUN	1841	1841	2054	2054
SHALE	2054	2054	5974	5974
RHINESTREET SHALE	5974	5974	6370	6370
MIDDLESEX SHALE	6370	6370	6468	6468
GENESEO SHALE	6468	6468	6482	6482
TULLY LIMESTONE	6482	6482	6508	6508
MAHANTANGO SHALE	6508	6508	6628	6628
MARCELLUS SHALE	6628	6628	6685	6685
ONONDAGA LS	6685	6685		
TD OF PILOT HOLE			6700	6700



Maximum TVD of	6703 ft T\	/D @ 12123 ft M	D	
wellbore:				
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	120	120
SHALE	120	120	270	270
SHALE/SS/LS	270	270	330	330
SHALE	330	330	430	430
SHALE/LS	430	430	685	685
PITTSBURGH COAL	685	685	690	690
SHALE/LS	690	690	740	740
SS	740	740	770	770
SHALE	770	770	970	970
LS	970	970	1010	1010
SHALE	1010	1010	1160	1160
SS	1160	1160	1220	1220
SHALE	1220	1220	1430	1430
SS	1430	1430	1490	1490
SHALE	1490	1490	1566	1566
MAXTON	1566	1566	1640	1640
SHALE	1640	1640	1820	1820
BIG INJUN	1841	1841	2054	2054
SHALE	2054	2054	5974	5947
RHINESTREET SHALE	5974	5947	6370	6295
MIDDLESEX SHALE	6370	6295	6468	6377
GENESEO SHALE	6574	6455	6607	6479
TULLY LIMESTONE	6607	6479	6654	6510
MAHANTANGO SHALE	6654	6510	6964	6631
MARCELLUS SHALE	6964	6631		10000
TD OF WELL	+		12960	6682



State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	1-30-2012	J
API#:	47-069-00080	

ION: Elevation: 1210'	Quadrangle: \(\)	/alley Grove WV		
	_			
District: Triadelphia Latitude: 8690' Feet South of 40 Deg.	County: Ohio Min.	.00 Sec.		
Longitude 14640' Feet West of 80 Deg.				
Company: Chesapeake Appalachia, L.L.C.	Casing &	Used in	Left in well	Cement fill
Address: P.O. Box 18496	Tubing	drilling	Lott in won	up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	291 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	705'	705'	106 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2251'	2251'	915 Cu. Ft.
Date Permit Issued: 4/27/2011	5 1/2"	15499'	15499'	4356 Cu. Ft.
Date Well Work Commenced: 5/16/2011				
Date Well Work Completed: 8/15/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6667'				
Total Measured Depth (ft): 15499'				
Fresh Water Depth (ft.): 230' 350'				
Salt Water Depth (ft.): 970', 1179', 1330'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 685'				
Void(s) encountered (N/Y) Depth(s) N				
PEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests 61 Static rock Pressure 4,334* psig (surface pressure) and producing formation producing formati	zone depth (ft)_ lowB _{WBt Hours}	6,897- 15,354' bl/d bl/d s *Calculated		AUG INTONMENTA
Second producing formation Pay zo	ne depth (ft)			Aus
Gas: Initial open flowMCF/d Oil: Initial open f	lowB	bl/d		AUG j
•		bl/d	<i>-</i>	VVV Denn
Final open flowMCF/d Final open flow Time of open flow between initial and final tests			j j,	. ~ XJ2 71

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Williams
Signature

8-15-2012 Date

Were core samples taken? YesN	o Were cuttings can	ught during drilling? Yes No
Were Electrical, Mechanical or Geophysica	al logs recorded on this well? If yes, please	e list
FRACTURING OR STIMULATING, I	PHYSICAL CHANGE, ETC. 2). THE V D OF THE TOPS AND BOTTOMS	ILS OF PERFORATED INTERVALS, WELL LOG WHICH IS A SYSTEMATIC OF ALL FORMATIONS, INCLUDING AL DEPTH.
Perforated Intervals, Fracturing, or Stimula	iting:	
(See Attached)		
Plug Back Details Including Plug Type and	d Depth(s):	
Formations Encountered: Surface:	Top Depth /	Bottom Depth
(See Attached)		
		Office of Oil & Gas

AUG 16 2012

Well Name and Number: Roy Ferrell 3H (833220)

PERFO	RATION RE	CORD	STIMULATION RECORD							
	Interval P	erforated				FI	uid	Proppin	g Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
7/28/2011	14,972	15,354	7/28/2011	14,972	15,354	Slk Wtr	12,740	Sand	574,499	85.0
7/29/2011	14,497	14,879	7/29/2011	14,497	14,879	Slk Wtr	11,413	Sand	580,216	86.0
7/30/2011	14,022	14,404	7/30/2011	14,022	14,404	Slk Wtr	12,096	Sand	578,683	86.0
7/30/2011	13,547	13,929	7/30/2011	13,547	13,929	Slk Wtr	12,036	Sand	591,513	88.0
7/31/2011	13,072	13,454	7/31/2011	13,072	13,454	Slk Wtr	11,459	Sand	575,830	85.0
7/31/2011	12,597	12,979	7/31/2011	12,597	12,979	Slk Wtr	12,200	Sand	575,942	84.0
8/1/2011	12,122	12,504	8/1/2011	12,122	12,504	Slk Wtr	11,473	Sand	578,633	88.0
8/7/2011	11,608	12,029	8/7/2011	11,608	12,029	Slk Wtr	14,851	Sand	588,568	82.0
8/8/2011	11,172	11,554	8/8/2011	11,172	11,554	Slk Wtr	11,299	Sand	577,922	88.0
8/9/2011	10,697	11,079	8/9/2011	10,697	11,079	Slk Wtr	9,778	Sand	576,933	86.0
8/9/2011	10,222	10,604	8/9/2011	10,222	10,604	Slk Wtr	12,072	Sand	579,540	82.0
8/10/2011	9,747	10,129	8/10/2011	9,747	10,129	Slk Wtr	13,146	Sand	580,682	86.0
8/11/2011	9,272	9,654	8/11/2011	9,272	9,654	Slk Wtr	10,161	Sand	584,043	88.0
8/12/2011	8,797	9,179	8/12/2011	8,797	9,179	Slk Wtr	8,253	Sand	580,441	85.0
8/13/2011	8,322	8,704	8/13/2011	8,322	8,704	Slk Wtr	10,813	Sand	571,197	87.0
8/13/2011	7,847	8,229	8/13/2011	7,847	8,229	Slk Wtr	10,912	Sand	580,502	84.0
8/14/2011	7,372	7,754	8/14/2011	7,372	7,754	Slk Wtr	12,750	Sand	582,512	87.0
8/15/2011	6,897	7,279	8/15/2011	6,897	7,279	Slk Wtr	11,235	Sand	520,905	86.0

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LATERAL WELLBORE (n	o pilot ho	le associated wi	ith this well)	
Maximum TVD of wellbore:	6667 ft T	VD @ 7049 ft ME)	
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	120	120
SHALE	120	120	270	270
SHALE/SS/LS	270	270	330	330
SHALE	330	330	430	430
SHALE/LS	430	430	685	685
PITTSBURGH COAL	685	685	690	690
SHALE/LS	690	690	740	740
SS	740	740	770	770
SHALE	770	770	970	970
LS	970	970	1010	1010
SHALE	1010	1010	1160	1160
SS	1160	1160	1220	1220
SHALE	1220	1220	1430	1430
SS	1430	1430	1490	1490
SHALE	1490	1490	1566	1566
MAXTON	1566	1566	1640	1640
SHALE	1640	1640	1820	1820
BIG INJUN	1841	1841	2054	2054
SHALE	2054	2054	6350	6334
MIDDLESEX SHALE	6350	6334	6475	6441
GENESEO SHALE	6475	6441	6517	6474
TULLY LIMESTONE	6517	6474	6568	6509
MAHANTANGO SHALE	6568	6509	6803	6623
MARCELLUS SHALE	6803	6623		
TD OF WELL			15499	6544



State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-14-2012	V
API#:	47-069-00078	

Farm name: Thelma Hays 3H		Oper	Operator Well No.: 833117				
LOCATION: Elevation: 1250'		Quad	rangle: Bethany,	wv			
District: Liberty		Coun	nty: Ohio				
Latitude: 3490'	Feet South of 40	Deg. 10	Min. 00	Sec.			
Longitude 5570°	Feet West of 80	Deg. 32	Min. 30	Sec.			

Chesapeake Appalachia, L.L.C. Company: Cement fill Used in Left in well Casing & P.O. Box 18496 up Cu. Ft. **Tubing** drilling Address: 100' 353 Cu. Ft. 100' Oklahoma City, OK 73154-0496 20" 718 Cu. Ft. 656' Eric Gillespie 13 3/8" 656' Agent: 988 Cu. Ft. Inspector: Bill Hendershot & Joe Taylor 2074' 2074' 9 5/8" 11595' 3003 Cu. Ft. 5 1/2" 11595' Date Permit Issued: 4-12-2011 Date Well Work Commenced: 5-23-2011 5-15-2012 Date Well Work Completed: Verbal Plugging: Date Permission granted on: Rotary 🗸 Cable Rig 6447'(cement plugs @ 5530' & 5709') Total Vertical Depth (ft): Total Measured Depth (ft): 11600' Fresh Water Depth (ft.): 200' 800' Salt Water Depth (ft.): Is coal being mined in area (N/Y)? Coal Depths (ft.): 590' Void(s) encountered (N/Y) Depth(s) Y 590'

OPEN FLOW DATA (If more	than two producing formations ple	ase include additional data	a on separate sheet)
Producing formation Marcell		epth (ft) 6,604' · 11,461'	
	MCF/d Oil: Initial open flow	Bbl/d	
	MCF/d Final open flow 186	Bbl/d	PECEIVED Office of On a
	en initial and final tests 30	Hours *Calculated	All & Com
	psig (surface pressure) after	Hours	AUG I & 2040
Second producing formation	Pay zone dep	th (ft)	En Department
Gas: Initial open flow	_MCF/d Oil: Initial open flow	Bbl/d	"Williamental rate of
Final open flow	_MCF/d Final open flow	Bbl/d	Environmental Protection
Time of open flow between	en initial and final tests	Hours	· • · · · · · · · · · · · · · · · · · ·
Static rock Pressure	psig (surface pressure) after	Hours	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Cillians

8-15-2012 Date

Were core samples taken? Yes	No_N	Were cuttings caugh	nt during drilling? Yes /	No
Were Electrical, Mechanical or Geo open hole logs run from 0-6447' MD; LWD GR fi	ophysical logs recorded on thi rom 5314-11600' MD.	is well? If yes, please li	st_GR, neutron, density, a	nd resistivity
NOTE: IN THE AREA BEL FRACTURING OR STIMULAT DETAILED GEOLOGICAL R COAL ENCOUNTERED BY TH	TING, PHYSICAL CHANG ECORD OF THE TOPS	GE, ETC. 2). THE WE AND BOTTOMS O	LL LOG WHICH IS A SY F ALL FORMATIONS, I	YSTEMATIC
Perforated Intervals, Fracturing, or	Stimulating:			
(See Attached)				
Plug Back Details Including Plug 7	Type and Depth(s): Cemer	nt plugs @ 5530' -	5980' & 5709' - 644	2'
Formations Encountered: Surface:	Top De	epth /	Bottom	<u>Depth</u>
(See Attached)				
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			Aug 16 WVDepartn Environmental P	Tentof Polecia
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Weil Number and Name: 833117 Thelma Hays 3H

PERFO	RATION RE	CORD		STIMULATION RECORD						
T	Interval Perforated				Fluid		Propping Agent		Average	
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
4/13/2012	11,102	11,461	5/10/2012	11,102	11,461	Slk wtr	7,928	Sand	423,760	80
5/11/2012	10,460	11,023	5/12/2012	10,460	11,023	Slk wtr	11,433	Sand	638,680	80
5/12/2012	9,817	10,381	5/13/2012	9,817	10,381	Sik wtr	10,472	Sand	642,540	78
5/14/2012	9,174	9,738	5/14/2012	9,174	9,738	Slk wtr	10,747	Sand	642,240	80
5/14/2012	8,532	9,095	5/14/2012	8,532	9,095	Sik wtr	9,704	Sand	537,640	79
5/14/2012	7,889	8,453	5/15/2012	7,889	8,453	Sik wtr	10,319	Sand	640,080	80
5/15/2012	7,247	7,810	5/15/2012	7,247	7,810	Slk wtr	9,942	Sand	642,071	80
5/15/2012	6,604	7,168	5/15/2012	6,604	7,168	Sik wtr	9,973	Sand	638,840	79
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VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SH	0	300
SS/LS	300	589
PITTSBURG COAL	589	595
LS/SH/SS	595	790
SS	790	1510
SH/SS	1510	1620
BIG LIME (LS)	1620	1646
BIG INJUN (SS)	1646	1920
SHALE	1920	6198
GENESEO (SH)	6198	6217
TULLY (LS)	6217	6260
HAMILTON (SH)	6260	6366
MARCELLUS (SH)	6366	6431
ONONDAGA (LS)	6431	
TD OF PILOT HOLE		6447

LATERAL SIDETRACK WELLBORE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)		Depth, (ft)
LS/SH	0	0	300	300	
SS/LS	300	300	589	589	
PITTSBURG COAL	589	589	595	595	
LS/SH/SS	595	595	790	790	i de la companya de l
SS	790	790	1510	1510	Office of Oil 2 Co.
SH/SS	1510	1510	1620	1620	Office of Oil & Gas
BIG LIME (LS)	1620	1620	1646	1646	AUG I C 2012
BIG INJUN (SS)	1646	1646	1920	1920	
SHALE	1920	1920	6211	6164	WV Department of Environmental Protection
GENESEO (SH)	6211	6164	6238	6166	mental Protes
TULLY (LS)	6238	6166	6294	6229	\mathcal{M}_{i}
HAMILTON (SH)	6294	6229	6535	6343	
MARCELLUS (SH)	6535	6343			
TD OF LATERAL			11600	6266	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE: 2-3-2012 API #: 47-073-02525

Farm name: Stephen Colvin 1	Operator Well No.: (832515)					
LOCATION: Elevation: 10	28'	Quadrangle:	Bens Run			
District: Lafayette		County: Pleas	sants			
Latitude:	Feet South of 39 Deg.	25 Min	. <u>00</u> Sec		—— AUG 0.8	
Longitude	Feet West of 81 Deg.	00 Min	. <u>00</u> Sec	. .	mud a g	
Company: Chesap	eake Appalachia, L.L.C.					
Address: P.O. Bo	ox 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Oklahoma City, OK	73154-0496	20"	80'	80'	Driven	
Agent: Eric Gilles	spie	13 3/8"	316'	316'	313 Cu. Ft.	
Inspector: Joe T		9 5/8"	2020'	2020'	959 Cu. Ft.	
Date Permit Issued:	12/14/2010	7"	6426'	6426'	633 Cu. Ft.	
Date Well Work Co	ommenced: 2/17/2011					
Date Well Work Co	40470044					
Verbal Plugging:						
Date Permission gra	anted on:					
Rotary V Cal	ole Rig					
Total Vertical De	pth (ft): 6,426' (cement plug @ 6,338')					
Total Measured D	epth (ft): 6,426'					
Fresh Water Dept						
Salt Water Depth						
Is coal being mined	l in area (N/Y)? N					
Coal Depths (ft.):						
Void(s) encountere	d (N/Y) Depth(s) N					
	more than two producing formation	ons please incluzione depth (ft)		ata on separate s	sheet)	
Gas: Initial open flow			_			
Final open flow 23			bl/d			
	between initial and final tests 24		s *Calculated			
Static rock Pressure 4.	psig (surface pressure) af	iternot	11.2			
Second producing for Gas: Initial open flow		ne depth (ft)	Bbl/d			
Final open flow	MCF/d Final open flow		bl/d			
Time of open flow	between initial and final tests	Hour	s			
Static rock Pressure_	psig (surface pressure) at	fterHo	ırs			

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Williams Signature 8/7/2012 Date

Were core samples taken? Yes X No	Were cuttings car	ught during drilling? Ye	s_X No
Were Electrical, Mechanical or Geophysical logs recorded spectral GR, FMI, sonic scanner	on this well? If yes, please	e list resistivity, neut	ron, density
NOTE: IN THE AREA BELOW PUT THE FOR FRACTURING OR STIMULATING, PHYSICAL CH DETAILED GEOLOGICAL RECORD OF THE TO COAL ENCOUNTERED BY THE WELLBORE FROM	ANGE, ETC. 2). THE V OPS AND BOTTOMS	VELL LOG WHICH IS OF ALL FORMATION	S A SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:			1000000
(See Attached)			
Plug Back Details Including Plug Type and Depth(s): Cer	ment Plug Back @	6,338'	
Formations Encountered: To Surface:	p Depth /	Во	ottom Depth
(See attached)			

Well Name and Number: Stephen Colvin 1 (832515)

PERFO	RATION RE	CORD	STIMULATION RECORD							
	Interval F	Perforated				FI	luid		ng Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
9/1/2011	6,168	6,170	10/17/2011	6,168	6,170	Slk Wtr	1,403	Sand	24,288	28.0
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LITHOLOGY	TOP DEPTH (FT)	BOTTOM DEPTH (FT)
SS	0	150
SLTSTN / SS	150	350
SHALE	350	400
SS	400	500
SHALE / SS	500	600
SLTSTN / SS	600	860
LS / SLTSTN	860	1320
SS	1320	1450
SLTSTN / SS	1450	1900
LS / SLTSTN	1900	1950
SLTSTN / SS	1950	2100
SLTSTN	2100	2500
SLTSTN / SS	2500	5370
RHINESTREET	5370	6000
MIDDLESEX	6000	6113
TULLY	6113	6116
MARCELLUS	6116	6175
ONONDAGA	6175	6395
ORISKANY	6395	6426

LITHOLOGY	TOP DEPTH (FT)	BOTTOM DEPTH (FT)
SS	0	150
SLTSTN / SS	150	350
SHALE	350	400
SS	400	500
SHALE / SS	500	600
SLTSTN / SS	600	860
LS/SLTSTN	860	1320
SS	1320	1450
SLTSTN / SS	1450	1900
LS / SLTSTN	1900	1950
SLTSTN / SS	1950	2100
SLTSTN	2100	2500
SLTSTN / SS	2500	5370
RHINESTREET	5370	6000
MIDDLESEX	6000	6113
TULLY	6113	6116
MARCELLUS	6116	6175
ONONDAGA	6175	6395
ORISKANY	6395	6426

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	4-11-2012
API#:	47-051-01308

Farm name: Bonnette 6H	Operator Well No.: 831314 Quadrangle: Wileyville					
LOCATION: Elevation: 1,457'						
District: Meade Latitude: 1,025' Feet South of 39 Deg. Longitude 13,700' Feet West of 80 Deg.	County: Mars 45 Min 42 Min	n. 00 Se				
Company: Chesapeake Appalachia, L.L.C.						
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.		
Oklahoma City, OK 73154-0496	20"	80'	80'	Driven		
Agent: Eric Gillespie	13 3/8"	1231'	1231'	448 Cu. Ft.		
Inspector: Bill Hatfield	9 5/8"	2888'	2888'	1279 Cu. Ft.		
Date Permit Issued: 9-18-2009	5 1/2"	11599'	11599'	2799 Cu. Ft.		
Date Well Work Commenced: 7-2-2011						
Date Well Work Completed: 7-31-2011						
Verbal Plugging:						
Date Permission granted on:						
Rotary Cable Rig						
Total Vertical Depth (ft): 7166'						
Total Measured Depth (ft): 11599'						
Fresh Water Depth (ft.): 395'						
Salt Water Depth (ft.): None						
Is coal being mined in area (N/Y)? N						
Coal Depths (ft.): 375'						
Void(s) encountered (N/Y) Depth(s) N						
Gas: Initial open flowMCF/d Oil: Initial open flow Final open flow 3.253*MCF/d Final open flow Time of open flow between initial and final tests 139 Static rock Pressure 4.654*psig (surface pressure) after	one depth (ft) 7 ow Bl 76	;335-11,458' bl/d l/d *Calculat rs		neet)		

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marland Welliams
Signature

8/3/20/2 Date

Vere core samples taken? YesNo		Were cuttings caught	during drilling? Yes_	No
ere Electrical, Mechanical or Geophysical lo	ogs recorded on this w	ell? If yes, please list		
OTF. IN THE ADEA DELOW DUT	THE FOLLOWS	NG 4) PPT-116		
OTE: IN THE AREA BELOW PUT RACTURING OR STIMULATING, PHY ETAILED GEOLOGICAL RECORD (OAL ENCOUNTERED BY THE WELL)	YSICAL CHANGE, OF THE TOPS AN	ETC. 2). THE WELI D BOTTOMS OF	LOG WHICH IS, A. ALL FORMATIONS	SYSTEMATIC , INCLUDING
rforated Intervals, Fracturing, or Stimulating	; :			
ee Attached)				* .
ug Back Details Including Plug Type and De	pth(s):			
Formations Encountered: arface:	Top Depth		Bottom	n Depth
ee Attached)				
		 		

Well Number and Name: Bonnette 6H 831314

PERFORATION RECORD					S	FIMULATIO	ON RECOR	D.		
	Interval P	erforated				Fluid		Proppir	Propping Agent	
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Average Injection
5/13/2012	11076	11458	5/13/2012	11076	11458	Slk wtr	9923	Sand	462220	76
5/13/2012	10380	10924	5/13/2012	10380	10924	Slk wtr	10358	Sand	594540	83
5/14/2012	9718	10324	5/14/2012	9718	10324	Slk wtr	10119	Sand	59448O	80
5/14/2012	9112	9659	5/14/2012	9112	9659	Slk wtr	10616	Sand	594720	85
5/16/2012	8506	9053	5/16/2012	8506	9053	Slk wtr	11121	Sand	575968	81
5/17/2012	7900	8447	5/17/2012	7900	8447	Slk wtr	10852	Sand	596160	84
5/17/2012	7335	7841	5/17/2012	7335	7841	Slk wtr	9897	Sand	59570O	85
						-				
								·		

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The fact of the control of the contr

HORIZONTAL WELL (No	pilot hole associat	ted with this pad)			
Maximum TVD of wellbore:	7166 ft TVD @ 11	.599 ft MD			
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)	
SHALE/SS	0	0	36	36	
SHALE	36	36	130	130	
SHALE/LS	130	130	200	200	
LS/SHALE	200	200	340	340	
SHALE/LS	340	340	434	434	
SHALE/SS	434	434	470	470	
LS/SS	470	470	548	548	
SHALE/SS_	548	548	600	600	
SS/LS	600	600	650	650	
SS/SHALE	650	650	697	697	
SHALE/SS	697	697	800	800	
SS SS/SHALE	800 850	800	850	850	
SS/SHALE SS	900	850 900	900 950	900	
SS/LS	950	950	1006	950 1006	
LS/SHALE	1006	1006	1070	1070	
LS	1070	1070	1080	1080	
LS/SHALE	1080	1080	1100	1100	
COAL	1100	1100	1108	1108	
LS/SHALE	1108	1108	1238	1238	
LS	1238	1238	1330	1330	
LS/SS	1330	1330	1400	1400	
LS/SS	1400	1400	1500	1500	
SHALE/SS	1500	1500	1550	1550	
SS/SHALE	1550	1550	1626	1626	
SHALE/SS	1626	1626	1650	1650	
LS/SHALE	1650	1650	1716	1716	
LS/SS	1716	1716	1740	1740	
SS/LS	1740	1740	1750	1750	
SS/SHALE	1750	1750	1794	1794	
SS SS/SHALE	1794	1794	1812	1812	
SS/SHALE LS/SHALE	1812 2000	1812 2000	2000 2052	2000 2052	
SHALE/SS	2052	2000	2100	2100	
SS/SHALE	2100	2100	2200	2200	
SHALE/SS	2200	2200	2250	2250	
LS/SHALE	2250	2250	2350	2350	
LS/SS	2350	2350	2405	2405	
SS/SHALE	2405	2405	2466	2466	
SS	2466	2466	2530	2530	

Tilly Comments of the Comment of the

SS/SHALE	2530	2530	2560	2560
SS/LS	2560	2560	2572	2572
SS/SHALE	2572	2572	2620	2620
SHALE/LS	2620	2620	6604	6603
SHALE/LS	6604	6603	6642	6641
LS/SHALE	6642	6641	6704	6703
SHALE	6704	6703	6750	6747
LS/SHALE	6750	6747	6850	6838
SHALE	6850	6838	6900	6884
LS/SHALE	6900	6884	7011	6962
Tully	7011	6962	7059	6992
Hamilton	7059	6992	7236	7066
Marcellus	7236	7066	7291	7080
Purcell	7291	7080	7306	7083
LS/SHALE	7306	7083	7600	7094
SHALE/LS	7600	7094	8106	7108
SHALE	8106	7108	8300	7112
SHALE/LS	8300	7112		
End of Well			11599	7166

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Rev	(9-1	1)

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-15-2012	J
API#:	47-051-01458	-

farm name: Fork Ridge MSH 5H	Operator We	ell No.: 833095		
OCATION: Elevation: 1391'	Quadrangle:			
District: Cameron	County: Mars			
Latitude: 3808 Feet South of 39 De Longitude 1223 Feet West of 80 De			ec.	
Longitude 1223 Feet West of 80 De			ec. ec.	
Company: Chesapeake Appalachia, L.L.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in	Left in well	Cement fill
Oklahoma City, OK 73154-0496	20"	drilling		up Cu. Ft.
Agent: Eric Gillespie		100'	100'	95 Cu. Ft.
Inspector: Bill Hendershot	13 3/8"	996'	996'	1016 Cu. Ft.
Date Permit Issued: 5-17-2011	9 5/8"	2524'	2524'	1134 Cu. Ft.
Date Well Work Commenced: 7-17-2011	5 1/2"	12368'	12368'	2891 Cu. Ft.
Date Well Work Completed: 4-12-2012				
Verbal Plugging:				
Date Permission granted on:	+			
Rotary Cable Rig	1			
Total Vertical Depth (ft): 6827'	 			
Total Measured Depth (ft): 12379'	1			
Fresh Water Depth (ft.): 120'	 			
Salt Water Depth (ft.): 1660'	 			
Is coal being mined in area (N/Y)? Y				
Coal Depths (ft.): 960'				
Void(s) encountered (N/Y) Depth(s) N				
PEN FLOW DATA (If more than two and the control of				
PEN FLOW DATA (If more than two producing formation Producing formation Pay 2	ns please include	additional data	on separate she	et)
Gas: Initial open flow MCF/d Oil: Initial open flo	ulle denin i mi 🗥	• 12,241		
Final open flow 3,524* MCF/d Final open flow		1		
Time of open flow between initial and final tests 64		عامياها د		
Static rock Pressure 4.419* psig (surface pressure) after	Hours *C er Hours	aicuialed	FIR	-
Socond 1	, — -		Ova 4 # K	CENE
Second producing formation Pay zone Gas: Initial open flow MCF/d Oil: Initial open flow	depth (ft)			The second of the state of the
Final and G	wBbl/d		4	UE 7 6 200
	Bbl/d		18/6: ×	900 to 2012 900 toxionto, envaria
Time of open flow between initial and final tests Static rock Pressurepsig (surface pressure) after	Hours		ε_{n}	epartmento enta (Prolec
psig (surface pressure) after	r Hann		mat Hills Cherry	计二次 经基础银行

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Dallow Williams Signature

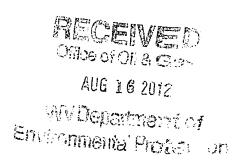
3-15-2012 Date

Were core samples taken? Yes No	X Were	cuttings caught during drilling? Yes X	No
Were Electrical, Mechanical or Geophysica resisitivity to 2550'; LWD GR from 6300' to TD.	l logs recorded on this well? I	f yes, please list GR, density, neutro	n,
NOTE: IN THE AREA BELOW PI FRACTURING OR STIMULATING, PI DETAILED GEOLOGICAL RECORD COAL ENCOUNTERED BY THE WEL	HYSICAL CHANGE, ETC. OF THE TOPS AND BO	2). THE WELL LOG WHICH IS A S OTTOMS OF ALL FORMATIONS	SZCOTERA A OFFICE
Perforated Intervals, Fracturing, or Stimulation	ing:		
(See Attachment)			
Plug Back Details Including Plug Type and I	Denth(s):		
The state of the s			· · · · · · · · · · · · · · · · · · ·
Formations Encountered: Surface:	Top Depth	/ Bottom]	Depth
(see attachment)			
			<u> </u>
		Office of Off & Gas)

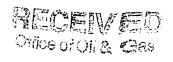
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Well Number and Name: 833095 Fork Ridge MSH 5H

PERFO	RATION RE			_	S	TIMULATI	ON RECOR	<u> </u>		
l 		Interval Perforated					luid		ing Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
3/13/2012	11,818	12,241	4/2/2012	11,818	12,241	Slk wtr	9,831	Sand	490,620	77
4/2/2012	11,292	11,750	4/3/2012	11,292	11,750	Slk wtr	14,176	Sand	494,220	85
4/9/2012	10,836	11,259	4/9/2012	10,836	11,259	Slk wtr	9,854	Sand	490,440	84
4/10/2012	10,345	10,768	4/10/2012	10,345	10,768	Slk wtr	8,650	Sand	491,680	86
4/10/2012	9,860	10,277	4/10/2012	9,860	10,277	Slk wtr	9,655	Sand	490,460	82
4/10/2012	9,364	9,786	4/10/2012	9,364	9,786	Slk wtr	9,685	Sand	489,860	85
4/10/2012	8,873	9,299	4/11/2012	8,873	9,299	Sik wtr	10,073	Sand		82
4/11/2012	8,382	8,804	4/11/2012	8,382	8,804	Sik wtr	9,455		490,400	
4/11/2012	7,891	8,313	4/11/2012	7,891	8,313	Sik wtr		Sand	490,460	85
4/12/2012	7,403	7,826	4/12/2012	7,403	7,826	Sik wtr	9,931	Sand	489,880	81
		1,020	4712/2012	7,403	7,020	SIK WIF	10,191	Sand	491,760	82



HORIZONTAL WELL (N Maximum TVD of			<i>'</i>	
wellbore:	6827 ft TVD @ 8	214 ft MD		
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth TVD (ft)
SS and LS	0	0		
SS and minor LS	170	0 170	170	17
SH and minor SS	280	280	280	28
SS and LS	310	310	310	31
SS and minor LS	420	420	420	42
SH and SS	490	420	490	49
SS	610		610	61
SS and minor LS	730	610 730	730	73
SS and LS	790	790	790	79
LS and minor SS	840	840	840	84
LS	880	880	880 960	880
Pittsburgh Coal	960	960	1000	960
SS	1000	1000	1036	1000
SS and minor LS	1036	1036	1060	1030
SS and minor SILTSTN	1060	1060	1150	1060
SS	1150	1150	1860	1150 1860
Maxton	1787	1787	1802	1802
SS	1802	1802	1860	1860
SS and minor LS	1860	1860	1880	1880
SS	1880	1880	2011	2011
Big Lime	2011	2011	2020	2010
SS and LS	2020	2020	2044	2044
Big Injun	2044	2044	2050	2050
SS	2050	2050	2430	2430
БН	2430	2430	6840	6574
Middlesex	6840	6574	6953	6655
Seneseo	6953	6655	6984	6666
ully	6984	6666	7028	6700
lamilton	7028	6700	7340	6799
Marcellus	7340	6800	, 340	0/33
nd of Well			12379	6798



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State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-15-2012	٧
API#:	47-051-01457	

Farm name: Fork Ridge MSH 10H	Operator Well No.: 833096				
LOCATION: Elevation: 1,391'	Quadrangle: Glen Easton				
District: Cameron	County: Man	shall			
Latitude: Feet South of 9 Deg.		n. ³⁰ Se	<u>с.</u>		
Longitude 5769 Feet West of 80 Deg	. 37 Min	n. 30 Se	c.		
Company: Chesapeake Appalachia, L.L.C.					
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Oklahoma City, OK 73154-0496	20"	90'	90'	Driven	
Agent: Eric Gillespie	13 3/8"	1012'	1012'	1094 Cu. Ft.	
Inspector: Bill Hendershot	9 5/8"	. 2579'	2579'	1324 Cu. Ft.	
Date Permit Issued: 5-20-2011	5 1/2"	12862'	12862'	3039 Cu. Ft.	
Date Well Work Commenced: 8-8-2011					
Date Well Work Completed: 4-13-2012					
Verbal Plugging:					
Date Permission granted on:					
Rotary Cable Rig					
Total Vertical Depth (ft): 6870'					
Total Measured Depth (ft): 12862'					
Fresh Water Depth (ft.): 120'					
Salt Water Depth (ft.): 1660'					
Is coal being mined in area (N/Y)? Y					
Coal Depths (ft.): 960'					
Void(s) encountered (N/Y) Depth(s) N					
Gas: Initial open flow MCF/d Oil: Initial open flo	one depth (ft)_7	de additional da 625' - 12,727' ol/d	ata on separate sh	neet)	
Final open flow 3,225* MCF/d Final open flow			US Free	ar.	
Time of open flow between initial and final tests 57 Static rock Pressure 4.466* psig (surface pressure) aft		*Calculated		e ve	
psig (surface pressure) and	erHour	S		Of OH B. Can	
Second producing formation Pay zon		-1	AU	6 16 2012 Destriction	
Gas: Initial open flow MCF/d Oil: Initial open flo		ol/d	VEW 183	- 16 ZUIL	
Final open flow MCF/d Final open flow		l/d	En Yav De	valler out of	
Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) after	Hours er Hour	·	- invironme	ueitris ocitof Il ta ' Fistoliculion	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marline Williams
Signature

8-153012 Date

were core samples taken? YesNo_X	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs reco	orded on this well? If yes, please list LWD gamma ray from 6250' MD to T
	FOLLOWING: 1). DETAILS OF PERFORATED INTERVAL L CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMAT IE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDI FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
See Attached)	
lug Back Details Including Plug Type and Depth(s):	
The second morading Fing Type and Depth(s):	
Formations Encountered: urface:	Top Depth / Bottom Depth
ee attached)	
	MECETVED OF STREET
	Office of Off 3. Gas AUG 1 6 2012
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Well Number and Name: 833096 Fork Ridge MSH 10H

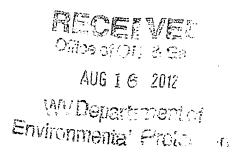
PERFO	RATION RE				S	TIMULATI	ON RECOR			
	Interval Perforated				·		luid		ing Agent	Average
Date	From	To	Date	Interval	Treated	Туре	Amount	Туре		Injection
3/13/2012	12,171	12,727	4/2/2012	12,171	12,727	Slk wtr	13,576	Sand	Amount 599,600	82
4/3/2012	11,523	12,078	4/3/2012	11,523	12,078	Slk wtr	12,289			84
4/3/2012	10,874	11,430	4/3/2012	10,874	11,430	Sik wtr	13,284	Sand	664,970	83
4/4/2012	10,225	10,781	4/4/2012	10,225	10,781	Slk wtr		Sand	664,840	83
4/4/2012	9,576	10,129	4/4/2012	9,576	10,129	Slk wtr	11,030	Sand	664,980	
4/4/2012	8,928	9,483	4/5/2012	8.928	9,483		12,045	Sand	664,780	85
4/5/2012	8,279	8,834	4/12/2012	8,279		Sik wtr	11,232	Sand	665,440	84
4/12/2012	7,625	8,185	4/13/2012		8,834	Sik wtr	12,075	Sand	664,560	85
		0,100	4/13/2012	7,625	8,185	Slk wtr	12,289	Sand	659,620	84
										
										
							-			

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WW Department of Environmental Protes

LATERAL WELLBORE (no	vertical pilot hole	associated with	this well)				
Maximum TVD of 6870 ft TVD @ 12862 ft MD							
Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)			
SS and LS	0	0	170	170			
SS and minor LS	170	170	280	280			
SH and minor SS	280	280	310	310			
SS and LS	310	310	420	420			
SS and minor LS	420	420	490	490			
SH and SS	490	490	610	610			
SS	610	610	730	730			
SS and minor LS	730	730	790	790			
SS and LS	790	790	840	840			
LS and minor SS	840	840	880	880			
LS	880	880	960	960			
Pittsburgh Coal	960	960	1000	1000			
SS	1000	1000	1036	1036			
SS and minor LS	1036	1036	1060	1060			
SS and minor SILTSTN	1060	1060	1150	1150			
SS	1150	1150	1860	1860			
SS and minor LS	1860	1860	1880	1880			
SS	1880	1880	2020	2020			
SS and LS	2020	2020	2050	2050			
SS	2050	2050	2430	2430			
SH	2430	2430	6921	6550			
Middlesex	6921	6550	7053	6637			
Geneseo	7053	6637	7090	6656			
LS and SH	7090	6656	7105	6666			
Tully	7105	6666	7180	6700			
SH	7180	6700	7463	6802			
Marcellus	7463	6802					
End of Well			12862	6870			



State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	2012-11-29
API#:	47-9101227

Farm name: Charles H. Cather et al		II No.: <u>513055</u>		
LOCATION: Elevation: 1183	_ Quadrangle:	Rosemont		
District: Unknown	County: Tay	lor, WV		
Latitude: 39.30096 Feet South of Deg.	Mir	nSe		
Longitude_80.16334 Feet West of West Deg	,Mir	nSec	3 .	
Company: EQT Production Company				·
Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	
Agent: Cecil Ray	13 3/8	1,040	1,040	912
Inspector: Brian Harris	9 5/8	2,830	2,830	1,094.8
Date Permit Issued: 2011-02-24	5 1/2	12,147	12,147	1,438.8
Date Well Work Commenced: 2011-06-30				
Date Well Work Completed: 2012-02-27				
Verbal Plugging:			1	
Date Permission granted on:				
Rotary Cable Rig V				
Total Vertical Depth (ft): 7,440 ft				
Total Measured Depth (ft): 12,171 ft				
Fresh Water Depth (ft.): 55, 542 ft				
Salt Water Depth (ft.): 1,878 ft				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 450, 470, 685				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Marcellus Pay	ions please incli zone depth (ft)		ata on separate s	sheet)
Gas: Initial open flow MCF/d Oil: Initial open	• • •	 Bbl/d		
Final open flow 3,440 MCF/d Final open flo		bl/d	ीक्ष्र क	organismost Annos
Time of open flow between initial and final tests				
Static rock Pressure 2,416 psig (surface pressure) a	afterHo	urs		
Second producing formation Pay 20	one depth (ft)			
Gas: Initial open flow MCF/d Oil: Initial open	•	Bbl/d		
Final open flow MCF/d Final open flo		bl/d	and the second of the second	n On one of the company
Time of open flow between initial and final tests			and the state of t	
Static rock Pressurepsig (surface pressure) a	interno	uis		
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those ind				
that the information is true, accurate, and complete.	1	20	12-11-29	
Signature			Date	

Were core samples taken? YesNo_X	Were cuttings caught during drilling? Yes	No_X
Were Electrical, Mechanical or Geophysical logs recorded	on this well? If yes, please list Geophysical	
NOTE: IN THE AREA BELOW PUT THE FOR FRACTURING OR STIMULATING, PHYSICAL CH DETAILED GEOLOGICAL RECORD OF THE TO COAL ENCOUNTERED BY THE WELLBORE FROM	IANGE, ETC. 2). THE WELL LOG WHICH IS A S OPS AND BOTTOMS OF ALL FORMATIONS,	SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:		
See Attachment		
Plug Back Details Including Plug Type and Depth(s): Isola		
Kick off plug (145 sacks of Standard Ceme	ent at 1.15 ft/sack) Top 2,830 ft/Bottom	3,230ft
Formations Encountered: To Surface:	op Depth / Bottom	<u>Depth</u>
Fill 0 / 28 Sand 28 / 32 Fill 32 / 78 Redr	rock 78 / 83 Fill/Clay 83 / 107 Redrock	107 / 113
Fill/Clay 113 / 169 Sand 169 / 190 sand/Sha	ale 190 / 450 Coal 450 / 460 Sand/Shale	460 / 470
Coal 470 / 480 Gray Shale 480 / 685 Coal	685 / 700 Sandstone 700 / 892 Sand 8	392 / 905
Sandstone 905 / 950 Sand 950 / 955 Sandstone 955 / 1	1,070.00 Sand 1,070.00 / 1,078.00 Sandstone 1,078.	.00 / 1,094.00
Sand 1,094.00 / 1,112.00 Sandstone 1,112.00 / 1,134.	.00 Sand 1,134.00 / 1,140.00 Sandstone 1,140.0	00 / 1,166.00
Sand 1,166.00 / 1,180.00 Sandstone 1,180.00 / 1,207.	.00 Sand 1,217.00 / 1,228.00 Sandstone 1,228.0	00 / 1,320.48
Big Lime 1,320 / 1,424.65 Big Injun 1,424.65	5 / 1,577.04 Weir Sand 1,577.04 / 1,810	
Gantz 1,810 / 1,879.22 Fifty Foot 1,879.22	/ 1,949.82Thirty Foot 1,949.82 / 2,008.3	6
Gordon 2,008.36 / 2,128.03Fourth Sand 2	,128.03 / 2,343.85 Fifth Sand 2,343.85 / 2	2,371.67
Bayard 2,371.67 / 2,783.3B-5 2,783.3 / 3,0	001.61Speechley 3,001.61 / 3,332.79	
Riley 3,717.32 / 4,346.2Benson 4,346.2 / 4	4,704.67 Elk 4,704.67 / 6,572.83 🗆	
Sonyea 6,572.83 / 6,901.42 Middlesex 6,90		
Geneseo 7,296.36 / 7,316.42 Tully 7,316.42	2 / 7,369.64 Hamilton 7,369.64 / 7,502.25	<u> </u>
Marcellus / 7,502.25 Purcell / 7,566.8 Che	erry Valley / 7,643.08	

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
1	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/10/2012	11852 - 12092		7,946.00	8,454.00	5 Min: 4401
					10 Min: 4268
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4250
85.50	8,856.00	5,091.00	1.12		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
404,172.00	10,183.00		2,000.00		
Stage	Formation	Frac Type		-	
2	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/10/2012	11550 - 11792		7,359.00	8,375.00	5 Min: 4587
					10 Min: 4311
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4172
92.70	8,958.00	5,363.00	1.15		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
401,251.00	9,108.00		1,000.00		
Stage	Formation	Frac Type			
3	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/10/2012	10950 - 11190		8,056.00	8,364.00	5 Min: 4865
					10 Min: 4585
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4447
93.30	8,780.00	5,530.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
801,642.00	9,535.00				

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
4	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/10/2012	10950 - 11190		7,566.00	8,299.00	5 Min: 4979
					40.111 4000
Avg Rate	Max Press PSI	ISIP	Frac Gradient	'	10 Min: 4606 15 Min: 4461
96.70	8,733.00	5,524.00	1.17		
			A -1 -1 - O - 1		
Sand Proppant	Water-bbl 10,019.00	SCF N2	Acid-Gal 1,000.00		
398,242.00	10,019.00		1,000.00		
Stage	Formation	Frac Type			
5	MARCELLUS	Water	•		
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/11/2012	10650 - 10892		7,261.00	8,334.00	5 Min: 4906
					10 Min: 4628
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4485
94.00	8,640.00	5,605.00	1.18		
Cand Dramant	Water-bbl	SCF N2	Acid-Gal		
Sand Proppant 403,271.00	10,010.00	SCF NZ	1,000.00		
			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Stage	Formation	Frac Type		:	
6	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/11/2012	10350 - 10592		7,404.00	8,230.00	5 Min: 5144
					10 Min: 4788
Avg Rate	Max Press PSI	ISIP	Frac Gradient	:	15 Min: 4581
94.40	8,570.00	5,424.00	1.16		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
405,533.00	9,436.00		1,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type	tentricke the expense		
7	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/12/2012	10050 - 10290	•	7,332.00	8,191.00	5 Min: 4853
					40 Min. 4540
Ave Dete	Max Press PSI	ISID	Frac Gradient		10 Min: 4512 15 Min: 4344
Avg Rate 88.30	8,943.00	5,499.00	1.16		
00.00					-
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
408,550.00	11,822.00		1,000.00		
Stage	Formation	Frac Type			
8	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/12/2012	9750 - 9992		7,839.00	8,266.00	5 Min: 5119
					10 Min: 4749
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4530
95.10	8,912.00	5,603.00	1.18		
		005 110	A = 1-1 O = 1		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal 1,000.00		
405,170.00	9,880.00		1,000.00	HERMIN SEC.	
Stage	Formation	Frac Type			
9	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/12/2012	9450 - 9692	!	7,872.00	8,133.00	5 Min: 5049
					10 Min: 4648
Avg Rate	Max Press PS	ISIP	Frac Gradient		15 Min: 4392
98.40			1.15		
0 - 1 5	Water-bb	SCF N2	Acid-Gal		
Sand Proppant 395,022.00			1,000.00		
395,022.00	9,940.00				

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
10	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/12/2012	9150 - 9390		7,475.00	8,045.00	5 Min: 5048
					10 Min: 4673
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4455
99.70	8,418.00	5,647.00	1.18		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
397,469.00	9,828.00		1,000.00		
Stage	Formation	Frac Type			
11	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/13/2012	8850 - 9090	# OI pella	6,828.00	7,759.00	5 Min: 4771
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			·		
Aver Dete	Max Press PSI	ICID	Frac Gradient		10 Min: 4463 15 Min: 4306
Avg Rate 97.80	8,356.00	5,338.00	1.14		10 10
	•				
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
777,382.00	9,704.00		1,000.00		
Stage	Formation	Frac Type			
12	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/13/2012	8550 - 8792		6,835.00	8,002.00	5 Min: 5088
					10 Min: 4845
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4696
95.60	8,962.00	6,035.00	1.23		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
404,740.00	10,187.00		1,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
13	MARCELLUS	Water			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/13/2012	8250 - 8492		6,399.00	7,617.00	5 Min: 4193
					10 Min: 4081
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4010
94.00	8,116.00	4,575.00	1.04		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
401,820.00	9,807.00		1,000.00		
Stage	Formation	Frac Type			
14	MARCELLUS	Water			
Dete	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
Date 1/13/2012	7950 - 8190	# OI peris	6,747.00	6,903.00	5 Min: 4227
17 10,20 12					40.111 4004
A D.A.	Max Press PSI	ISID	Frac Gradient		10 Min: 4061 15 Min: 3980
Avg Rate					
100.20	8,541.00	4,951.00	1.09		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
			1,000.00		

DATE:	2012-11-29	
API#:	47-9101226	

ION: Elevation: 1183	Quadrangle: _F	Rosemont		
	County: Tayl			_
District: Unknown Latitude: 39.30348 Feet South of Deg.	Min	Sec.		
Longitude -80.15786 Feet West of West Deg	Min	Sec.		
EQT Production Company				
Company:	Casing &	Used in	Left in well	Cement fill
Address: EQT Plaza, Suite 1700	Tubing	drilling	40	up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	134.52
Agent: Cecil Ray	13 3/8	1,056	1,056	912
Inspector: Brian Harris	9 5/8	2,955	2,955	1094.8
Date Permit Issued: 2011-02-24	5 1/2	12,023.68	12,023.68	1,429.5
Date Well Work Commenced: 2011-06-16				
Date Well Work Completed: 2012-03-01			<u> </u>	
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig V			<u> </u>	
Total Vertical Depth (ft): 7,467.38			ļ	
Total Measured Depth (ft): 12,037				1
Fresh Water Depth (ft.): 55, 542 ft				
Salt Water Depth (ft.): 1,878 ft				
Is coal being mined in area (N/Y)? N			<u> </u>	
Coal Depths (ft.): 150, 331, 470, 524, 605			ļ	
Void(s) encountered (N/Y) Depth(s)				
Gas: Initial open flow MCF/d Oil: Initial open Final open flow 3,280 MCF/d Final open flow Time of open flow between initial and final tests	ny zone depth (n n flowl lowl Hou) Bb1/d Bb1/d irs	i aliga Si	and the second s
Static rock Pressure 2,736 psig (surface pressure)	atterH	ours		
Second producing formationPay	zone depth (ft)_			*
Gas: Initial open flowMCF/d Oil: Initial ope	n flow	_Bbl/d Bbl/d		
Final open flow MCF/d Final open f Time of open flow between initial and final tests			* 100	्रा
Static rock Pressurepsig (surface pressure) afterH	ours		a garagaga da kabada br>Tanggarang kabada da
tify under penalty of law that I have personally examin ne attachments and that, based on my inquiry of those in the information is true, accurate, and complete,	ad and am famil	liar with the info ediately responsi	rmation submitt ble for obtaining	ed on this document g the information I be

Were core samples taken? YesNo_X Were cuttings caught during drilling? YesNo_X
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Geophysical
NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:
See Attachment
Plug Back Details Including Plug Type and Depth(s):
Formations Encountered: Top Depth / Bottom Depth Surface:
Fill 0/74 Red Rock 78/84 Fill/Clay 84/107 Red Rock 107/110 Fill 110/150 Coal 150/153 Fill 153/169
Red Rock 169/174 Sand/Shale 174/331 Coal 331/336 Rosedale Gas Sand 336/524 Coal 524/53
Black Shale 530/605 Coal 605/610 Gray Shale 610/955 Red Sandstone 955/1320
Big Lime 1,320 / 1,424.65 Big Injun 1,424.65 / 1,577.04 Weir Sand 1,577.04 / 1,810
Gantz 1,810 / 1,879.22 Fifty Foot 1,879.22 / 1,949.82 Thirty Foot 1,949.82 / 2,008.36
Gordon 2,008.36 / 2,128.03Fourth Sand 2,128.03 / 2,343.85 Fifth Sand 2,343.85 / 2,371.67
Bayard 2,371.67 / 2,783.3B-5 2,783.3 / 3,001.61Speechley 3,001.61 / 3,332.79
Riley 3,717.32 / 4,346.2Benson 4,346.2 / 4,704.67 Elk 4,704.67 / 6,572.83
Sonyea 6,572.83 / 6,901.42 Middlesex 6,901.42 / 7,036.62 Genesee 7,036.62 / 7,296.36
Geneseo 7,296.36 / 7,316.42 Tully 7,316.42 / 7,369.64 Hamilton 7,369.64 / 7,502.25
Marcellus / 7,502.25 Purcell / 7,566.8 Cherry Valley / 7,643.08

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
1	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/26/2011	11717 - 11959		6,551.00	7,840.00	5 Min: 5116
					10 Min: 4464
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4431
93.00	8,692.00	6,103.00	1.25		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
401,200.00	11,233.00		2,000.00		
Stage	Formation	Frac Type			
2	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/27/2011	11417 - 11659		8,313.00	8,246.00	5 Min: 4535
					10 Min: 4297
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4169
90.51	9,206.00	5,346.00	1.15		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
399,063.00	10,649.00		2,000.00		
Stage	Formation	Frac Type			
3	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/27/2011	11117 - 11359		8,213.00	8,012.00	5 Min: 4424
					10 Min: 4142
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3944
97.15	9,166.00	5,853.00	1.22		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
398,531.00	10,193.00		2,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
4	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/27/2011	10817 - 11059		7,383.00	8,098.00	5 Min: 4896
					10 Min: 4523
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4311
94.00	8,871.00	6,060.00	1.24		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
393,777.00	10,132.00		2,000.00		
Stage	Formation	Frac Type			
5	MARCELLUS	Slickwater			
Data	From / To	# of worfs	DD Droce	ATP Psi	SIP Detail
Date 8/27/2011	From / To 10517 - 10759	# of perfs	BD Press 7,385.00	7,979.00	5 Min: 5070
0/2//2011	10017 - 10100		7,000.00	7,010.00	
					10 Min: 4603
Avg Rate	Max Press PSI		Frac Gradient		15 Min: 4361
96.00	8,871.00	5,511.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		•
400,670.00	9,992.00		2,000.00		
Stage	Formation	Frac Type			
6	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/28/2011	10217 - 10459		7,930.00	7,955.00	5 Min: 4581
					10 Min: 4314
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4175
97.90	9,027.00	5,325.00	1.14		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal	į	
401,730.00	10,115.00		2,000.00		

Summary	Treatment	Well	Attachment	Completion	EQT WR-35
			Frac Type	Formation	Stage
			Slickwater	MARCELLUS	7
SIP Detail	ATP Psi	BD Press	# of perfs	From / To	Date
5 Min: 5408	7,722.00	7,841.00		9917 - 10159	11/5/2011
10 Min: 5122					*
15 Min: 4906	- 1	Frac Gradient	ISIP	Max Press PSI	Avg Rate
		1.2	5,808.00	8,323.00	99.60
		Acid-Gal	SCF N2	Water-bbl	Sand Proppant
		2,000.00		10,068.00	404,591.00
			Frac Type	Formation	Stage
			Slickwater	MARCELLUS	8
SIP Detail	ATP Psi	BD Press	# of perfs	From / To	Date
5 Min: 5485	7,860.00	7,839.00		9617 - 9859	11/6/2011
10 Min: 5147					
15 Min: 4884		Frac Gradient	ISIP	Max Press PSI	Avg Rate
		1.22	5,938.00	9,335.00	100.90
		Acid-Gal	SCF N2	Water-bbl	Sand Proppant
		2,000.00		10,829.00	410,001.00
			Frac Type	Formation	Stage
			Slickwater	MARCELLUS	9
SIP Detail	ATP Psi	BD Press	# of perfs	From / To	Date
5 Min: 5444	7,315.00	6,353.00		9317 - 9559	11/6/2011
10 Min: 4988					
15 Min: 4719		Frac Gradient	ISIP	Max Press PSI	Avg Rate
		1.24	6,088.00	7,689.00	104.00
		Acid-Gal	SCF N2	Water-bbl	Sand Proppant
	- 1	2,000.00		10,338.00	407,707.00

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
	Formation	Frac Type			
Stage 10	MARCELLUS	Slickwater			
10	WARCELLOS	Siickwalei			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/6/2011	9017 - 9259		7,319.00	7,589.00	5 Min:
					10 Min:
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 15 Min:
101.00	8,880.00	5,862.00	1.21		
101.00	0,000.00	0,002.00	1.2.		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
398,520.00	9,966.00		2,000.00		
Stage	Formation	Frac Type			
11	MARCELLUS	Slickwater			
_ ,	P 17.	44 - 8	DD Ducce	ATP Psi	SIP Detail
Date	From / To	# of perfs	BD Press 6,156.00	7,607.00	5 Min:
11/6/2011	8717 - 8988		0, 130.00	7,007.00	J Will I.
					10 Min:
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min:
100.50	7,998.00	4,390.00	1.01		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
399,949.00	Water-bbi	001 N2	2,000.00		
330,540.00	-		_,000.00		
Stage	Formation	Frac Type			
12	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/6/2011	8419 - 8657		6,156.00	7,898.00	5 Min: 0
	M P P.O.	IOID	Frac Gradient		10 Min: 0 15 Min: 0
Avg Rate	Max Press PSI	_	Frac Gradient		10 141111. 0
97.80	9,744.00	7,650.00	U		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
365,608.00	9,473.00		2,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
13	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/7/2011	8117 - 8359		5,980.00	7,806.00	5 Min: 3754
					10 Min: 3543
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3389
100.00	8,826.00	4,675.00	1.05		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
399,450.00	10,583.00		2,000.00		
Stage	Formation	Frac Type			
14	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/7/2011	7817 - 8059	•	5,868.00	7,998.00	5 Min: 3538
					10 Min: 3338
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3200
91.70	9,112.00	4,316.00	1.06		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
399,535.00	11,514.00		2,000.00		

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State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	2012-11-29
API#:	47-9101225

Farm name: Charles H. Cather et al	Operator Well	No.: 513052		
LOCATION: Elevation: 1183	Quadrangle: _F	Rosemont		
District: Unknown	County: Tayl	or, WV		
Latitude: 39.30322 Feet South of Deg.			•	
Longitude <u>-80.16089</u> Feet West of <u>West</u> Deg.	Min.	Sec.		
Company: EQT Production Company				
Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement up Cu. F
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	0
Agent: Cecil Ray	13 3/8	1,060	1,060	912

Company:				
Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	0
Agent: Cecil Ray	13 3/8	1,060	1,060	912
Inspector: Brian Harris	9 5/8	2,830	2,830	1,130.5
Date Permit Issued: 2011-02-24	5 1/2	11,993	11,993	1387.1
Date Well Work Commenced: 2011-06-01				<u> </u>
Date Well Work Completed: 2012-03-05				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig V				
Total Vertical Depth (ft): 7,437.27				
Total Measured Depth (ft): 11,993				
Fresh Water Depth (ft.): 55, 542 ft				
Salt Water Depth (ft.): 1,878				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 150, 331, 470, 524, 605			<u> </u>	
Void(s) encountered (N/Y) Depth(s)				

	than two producing formations ple		
Gas: Initial open flow	MCF/d Oil: Initial open flow MCF/d Final open flow	Bbl/d	
Time of open flow betw	een initial and final testspsig (surface pressure) after		
Second producing formatio	n Pay zone dep	oth (ft)	
Gas: Initial open flow	MCF/d Oil: Initial open flow	Bbl/d	·
Final open flow	MCF/d Final open flow	Bbl/d	
Time of open flow betw	een initial and final tests	Hours	
Static rock Pressure	psig (surface pressure) after	Hours	Commence of creams

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

2012-11-29

Date

Were core samples taken? Yes	No_X	Were cuttings caught during	drilling? Yes	No_X
Were Electrical, Mechanical or Geoph	ysical logs recorded on	this well? If yes, please list Geo	ohysical	
NOTE: IN THE AREA BELOVER FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECOUNTERED BY THE	NG, PHYSICAL CHAN CORD OF THE TOP	NGE, ETC. 2). THE WELL LOC S AND BOTTOMS OF ALL	G WHICH IS A SY FORMATIONS, 1	YSTEMATIC
Perforated Intervals, Fracturing, or Sti	imulating:			
See Attachment				
Plug Back Details Including Plug Typ				
Formations Encountered: Surface:	Top l	Depth /	Bottom I	<u>Depth</u>
Fill 0/74 Red Rock 78/84 F	ill/Clay 84/107 Re	ed Rock 107/110 Fill 110/150-	- Coal 150/153	Fill 153/169
Red Rock 169/174 Sand/Sha	le 174/331 Coal 3	31/336 Rosedale Gas Sa	nd 336/524 C	Coal 524/530
Black Shale 530/605 Coal 6	605/610 — Gray	Shale 610/955 - Red Sand	Istone 955/132	0
Big Lime 1,320 / 1,424.65 B				
Gantz 1,810 / 1,879.22 Fifty	y Foot 1,879.22 / 1	,949.82Thirty Foot 1,94	9.82 / 2,008.36	J
Gordon 2,008.36 / 2,128.03				
Bayard 2,371.67 / 2,783.3				
Riley 3,717.32 / 4,346.2B				
Sonyea 6,572.83 / 6,901.42				3.36
Geneseo 7,296.36 / 7,316.42				
Marcellus / 7,502.25 - Purcel				

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
1	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/29/2011	11647 - 11889		7,752.00	8,282.00	5 Min: 4307
					10 Min: 4145
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4045
85.30	9,089.00	5,212.00	1.13		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
467,530.00	10,959.00		2,000.00		
Stage	Formation	Frac Type			
2	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
8/29/2011	11347 - 11589		8,560.00	8,146.00	5 Min: 5687
					10 Min: 5173
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4843
96.80	9,221.00	6,416.00	1.29		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
435,700.00	10,780.00		2,000.00		
Stage	Formation	Frac Type			
3	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
12/29/2011	11047 - 11289		7,365.00	7,972.00	5 Min: 5138
					10 Min: 4713
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4478
97.40	8,685.00	6,138.00	1.25		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
409,807.00	10,006.00		1,000.00		

•- -

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type		·	
4	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
12/29/2011	10747 - 10989		6,493.00	7,843.00	5 Min: 4798
					10 Min: 4474
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4290
96.20	9,154.00	5,531.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
373,433.00	9,543.00		1,000.00		
	Formation	Frac Type			
Stage 5	MARCELLUS	Slickwater			*1.00
3	WARGELLOO	Clickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
12/29/2011	10447 - 10689		6,749.00	7,883.00	5 Min: 4941
					10 Min: 4667
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4513
91.50	9,120.00	5,783.00	1.2		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
324,532.00	9,175.00		1,000.00		
Stage	Formation	Frac Type			
6	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/2/2012	10147 - 10389	•	6,599.00	7,764.00	5 Min: 5004
					10 Min: 4758
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 4756 15 Min: 4604
82.60	8,511.00				
	·				
Sand Proppant	Water-bbl 10,232.00		1,000.00		
400,678.00	10,232.00		1,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
7	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/3/2012	9847 - 10089		7,981.00	8,132.00	5 Min: 5379
					10 Min: 5289
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4844
95.80	9,027.00	5,985.00	1.23		
O d Drownant	Water-bbl	SCF N2	Acid-Gal		
Sand Proppant 400,903.00	11,347.00	001 N2	1,000.00		
400,903.00					
Stage	Formation	Frac Type			
8	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/3/2012	9547 - 9789		6,670.00	8,037.00	5 Min: 5425
					10 Min: 5185
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4922
96.90	8,872.00	5,636.00	1.18		
Cond Dropport	Water-bbl	SCF N2	Acid-Gal		
Sand Proppant 397,911.00	9,887.00	00	1,000.00		
		F T			
Stage	Formation	Frac Type Slickwater			
9	MARCELLUS	Siickwatei			
Date	From / To	# of perfs		ATP Psi	
1/4/2012	9247 - 9489		6,814.00	8,172.00	5 Min: 5109
					10 Min: 4774
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4560
98.90	8,773.00	5,907.00	1.22		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
402,875.00	_		1,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
10	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/4/2012	8947 - 9189		6,314.00	7,938.00	5 Min: 5393
					10 Min: 5117
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4951
96.50	8,532.00	6,001.00	1.23		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
404,884.00	9,985.00	50.	1,000.00		
	· · · · · · · · · · · · · · · · · · ·				
Stage	Formation	Frac Type			
11	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/5/2012	8647 - 8889		6,996.00	7,784.00	5 Min: 5087
					10 Min: 4776
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4586
100.10	8,631.00	5,884.00	1.21		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
383,231.00	9,739.00		1,000.00		
Stage	Formation	Frac Type			
12	MARCELLUS	Slickwater			
	5	# of perfs	BD Press	ATP Psi	SIP Detail
Date 1/5/2012	From / To 8347 - 8589	•	7,736.00	7,925.00	5 Min: 5005
1/5/2012	8347 - 0303		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·	
					10 Min: 4736 15 Min: 4566
Avg Rate	Max Press PSI		Frac Gradient		15 IVIII: 4500
97.80	8,426.00	5,557.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
404,084.00	11,041.00)	1,000.00		

						_
EQT WR-	35	Completion	Attachment	Well	Treatment	Summary
St	age	Formation	Frac Type			
	13	MARCELLUS	Slickwater			
r	Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
1/5/2		8047 - 8289	•	6,742.00	7,392.00	5 Min: 5247
		Man Danie BOI	IOID	Fuer Cuedic=4		10 Min: 4900 15 Min: 4692
Avg F	Rate	Max Press PSI	ISIP	Frac Gradient		15 Will1. 4092
9	9.40	8,469.00	5,922.00	1.21		
Sand Prop	pant	Water-bbl	SCF N2	Acid-Gal		
401,88	1.00	9,937.00		1,000.00		
S	tage	Formation	Frac Type			
	_					
	14	MARCELLUS	Slickwater			
	14	MARCELLUS			ATD D. I	01D D -4-11
ı	14 Date	MARCELLUS From / To	# of perfs	BD Press	ATP Psi	SIP Detail
				BD Press 6,098.00	ATP Psi 7,627.00	SIP Detail 5 Min: 4703
	Date	From / To				
	Date 2012	From / To	# of perfs			5 Min: 4703
1/6/2 Avg	Date 2012	From / To 7747 - 7989	# of perfs	6,098.00		5 Min: 4703 10 Min: 4425
1/6/2 Avg	Date 2012 Rate 97.90	From / To 7747 - 7989 Max Press PSI	# of perfs ISIP 5,717.00	6,098.00 Frac Gradient 1.19		5 Min: 4703 10 Min: 4425

DATE:	11/20/2012	
API #:	47-033-05596	

Farm name: Williams, Betty Ann	Operator Well	No.: Andrews Ur	nit 1H		
LOCATION: Elevation: 1215'	Quadrangle: <u>W</u>	/olf Summit		 	
District: Tenmile	County: Harriso	on			
Latitude: 3,395 Feet South of 39 Deg.	17 Min.	30 Sec.			
Longitude 8,860 Feet West of 80 Deg.	27 Min.	30 Sec.			
Company: Antero Resources Appalachian Corp					
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Denver, CO 80202	20" 94#	67'	67'	64 Cu. Ft Class A	
Agent: CT Corporation System	13-3/8" 54.5#	502'	502'	697 Cu. Ft. Class A	
Inspector: Tristan Jenkins	9-5/8" 36#	2587'	2587'	1053 Cu. Ft. Class A	
Date Permit Issued: 5/17/2012	5-1/2" 20#	-14,552'	14,552'	3576 Cu. Ft. Class H	
Date Well Work Commenced: 5/19/2012					
Date Well Work Completed: 9/9/2012	2-3/8" 4.7#	7058'			٠,
Verbal Plugging: N/A					
Date Permission granted on: N/A					
Rotary Cable Rig					
Total Vertical Depth (ft): 7,065' TVD					
Total Measured Depth (ft): 14,552' MD					
Fresh Water Depth (ft.): 136', 207', 297'					
Salt Water Depth (ft.): None					
Is coal being mined in area (N/Y)? No					
Coal Depths (ft.): 116', 196', 221'					
Void(s) encountered (N/Y) Depth(s) No, N/A					
OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 6,940' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow N/A Bbl/d Final open flow 11,758 MCF/d Final open flow N/A Bbl/d Time of open flow between initial and final tests N/A Hours Static rock Pressure 3600 psig (surface pressure) after Hours					
	one depth (ft)	bl/d	,	m	
Gas: Initial open flowMCF/d Oil: Initial open flowMCF/d Final o		ol/d		20 02	
Time of open flow between initial and final tests		3		7. T	
Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours Static rock Pressurepsig (surface pressure) afterHours					
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indithat the information is true, accurate, and complete. Signature	l and am familia lividuals immedi	r with the infor	mation submitt	ed on this documen	n

Were core samples taken? YesN	No X Were cutting	gs caught during drilling? YesNo_X
were core samples taken:	· · · · · · · · · · · · · · · · · · ·	
Were Electrical, Mechanical or Geophysic	cal logs recorded on this well? If yes, I	please IIst_
This is a subsequent well. Antero only runs wireline logs on the first	t well on a multi-pad (Post East Unit 5H APIN 47-033-03360).	Basic No. of the Control of the Cont
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE W	PHYSICAL CHANGE, E1C. 2). 11	DETAILS OF PERFORATED INTERVALS, HE WELL LOG WHICH IS A SYSTEMATION OF ALL FORMATIONS, INCLUDING TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimu	lating:	
Perforations: 7099'-14,487' MD (1	596 holes)	carrying 776 059# 100 mesh.
Frac'd w/ 13,986 gals 15% HCL A	Acid, 158,343 DDIS SIICK Water C	Saltying 770,000m.
2,936,779# 40/70 and 1,765,469#	# 20/40 sand.	
Plug Back Details Including Plug Type	and Depth(s): N/A	
Ting Back Bound Institute Co.		
		Bottom Depth
Formations Encountered:	Top Depth	
Surface:		
Bi-Limo (ost)	1,586'	2,120'
Big Lime (est.) Fifty Foot Sand (est.)	2,121'	2,247'
The state of the s	2,248'	2,532'
Gordon (est.)	2,533'	2,583'
Fifth Sandstone (est.)	2,584'	3,239'
Bayard (est.)	3,240'	3,467'
Speechley (est.)	3,468'	4,001'
Balltown (est.)	4,002'	4,578'
Bradford (est.)	4,579'	4,871'
Benson (est.)	4,872'	5,100'
Alexander (est.)	5,101'	5,628'
Elk (est.)	5,629'	6,297'
Rhinestreet (est.)	6,298'	6,554'
Sycamore (est.)		6,558'
Middlesex	6,555'	6,630'
Sonyea	6,559'	6,683'
West River Shale	6,631'	6,720'
Genundewa	6,684'	6,746'
Burket	6,721'	6,939'
Tully	6,747'	7,065' TVD
Marcellus	6,940'	7,500

Marcellus

DATE:	11/20/2012	
API#:	47-033-05601	

name: Williams, Betty Ann	_ Operator Well	No.: Andrews U	Init 2H	
ATION: Elevation: 1215'	_ Quadrangle: <u>W</u>	Volf Summit		
District: Tenmile	County: Harris	on		
Latitude: 3,386 Feet South of 39 Deg				
Longitude 8.856 Feet West of 80 Deg	g. <u>27</u> Min.	30 Sec	.	
Company: Antero Resources Appalachian Corp				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	64 Cu. Ft Class A
Agent: CT Corporation System	13-3/8" 54.5#	334'	334'	464 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2583'	2583'	1052 Cu. Ft. Class A
-Date Permit-Issued: 5/15/2012	5-1/2" 20#	14,935'	14,935'	3683 Cu. Ft. Class H
Date Well Work Commenced: 6/18/2012				
Date Well Work Completed: 9/15/2012	2-3/8" 4.7#	7208'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,109' TVD				
Total Measured Depth (ft): 14,939' MD, 7,050' TVD (BH	L)			
Fresh Water Depth (ft.): 110', 133', 176'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 116', 196', 221'				
Void(s) encountered (N/Y) Depth(s) No, N/A				
DENIELOW DATA (If more than two producing forms	tions please inclu	ide additional o	lata on separate	sheet)
Producing formation Marcellus Pa	y zone depth (ft)_		Гор)	
Gas: Initial open flow MCF/d Oil: Initial open	ı flow <u>N/A</u> B	bl/d		
Final open flow 14,257 MCF/d Final open fl		ol/d		
Time of open flow between initial and final tests No. Static rock Pressure 3600 psig (surface pressure)	after Hou			
	zone depth (ft)		Ş	E 21 OF
Gas: Initial open flow MCF/d Oil: Initial open Final open flow MCF/d Final open flow		bl/d bl/d	•	
Final open flow MCF/d Final open flow Time of open flow between initial and final tests				E S C
Static rock Pressurepsig (surface pressure)		ırs		120日
rtify under penalty of law that I have personally examine	ed and am familia	r with the info	rmation submitt	ed on this docume
the attachments and that, based on my inquiry of those in	idividuals immed	iately responsi	ble for obtaining	s (#37) inomigration
the information is true, accurate, and complete.	•			I: I
$10 \cdot 00$	1		مادما	

Were core samples taken? YesNo	X Were cut	ttings caught during drilling? YesNoX
Wele cole sumples tations = 55		Yes – CBI
Were Electrical, Mechanical or Geophysica	al logs recorded on this well? If you are a multi-good (Boot East Light 5H APIH 47-033-055)	es, please list 60). Please reference wireline logs submitted with Form WR-35 for Post East Unit 5H.
This is a subsequent well. Antero only runs wireline logs on the tirst w	ell on 8 multi-pad (Post East Offit 54 AFIF 17-055-055	00,1,200
TO A CONTINUE OF STIMUL ATING P	PHYSICAL CHANGE, ETC. 2) D OF THE TOPS AND BOT	DETAILS OF PERFORATED INTERVALS, THE WELL LOG WHICH IS A SYSTEMATIC TOMS OF ALL FORMATIONS, INCLUDING TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimula	ating:	
Perforations: 7265'-14,870' MD (15	96 holes)	704 044# 100 mosh
Frac'd w/ 14,070 gals 15% HCL Ac	id, 161,610 bbls Slick Water	er carrying 781,944# 100 mesh,
2,945,528# 40/70 and 1,817,224#	20/40 sand.	
Plug Back Details Including Plug Type and	d Depth(s): N/A	
		Datters Donth
Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Big Lime (est.)	1,586'	2,120'
Fifty Foot Sand (est.)	2,121'	2,247'
Gordon (est.)	2,248'	2,532'
Fifth Sandstone (est.)	2,533'	2,583'
Bayard (est.)	2,584'	3,239'
Speechley (est.)	3,240'	3,467'
Balltown (est.)	3,468'	4,001'
Bradford (est.)	4,002'	4,578'
Benson (est.)	4,579'	4,871'
Alexander (est.)	4,872'	5,100'
Elk (est.)	5,101'	5,628'
Rhinestreet (est.)	5,629'	6,297'
Sycamore (est.)	6,298'	6,559'
Middlesex	6,560'	6,558'
Sonyea	6,559'	6,630'
West River Shale	6,631'	6,684'
Genundewa	6,685'	6,723'
Burket	6,724'	6,749'
Tully	6,750'	6,955'
Marcellus	6,956'	7,109' TVD

Tully Marcellus

that the information is true, accurate, and complete

DATE:	11/20/2012	
API #:	47-033-05588	_

arm name: Williams, Betty Ann	Operator Well	No.: Charles Un	ait 1H	
OCATION: Elevation: 1215'	Quadrangle: <u>V</u>	Volf Summit		
District: Tenmile	County: Harris	on		
Latitude: 3,404 Feet South of 39 Deg.	17 Min.	30 Sec	•	
Longitude 8.862 Feet West of 80 Deg.	27 Min.	Sec	•	
Company: Antero Resources Appalachian Corp				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft Class A
Agent: CT Corporation System	13-3/8" 54.5#	511'	511'	710 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2578'	2578'	1050 Cu. Ft. Class A
Date Permit Issued: 1/23/2012	-5-1/2" 20#	14,940'	14,940'	3686 Cu. Ft. Class H
Date Well Work Commenced: 3/4/2012				
Date Well Work Completed: 8/30/2012	2-3/8" 4.7#	7448'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,091' TVD				
Total Measured Depth (ft): 14,940' MD, 6,997' TVD (BHL)				
Fresh Water Depth (ft.): 20', 23', 40', 45', 50'				
Salt Water Depth (ft.): 1,510'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 116', 196', 221'				
Void(s) encountered (N/Y) Depth(s) No, N/A				
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay: Gas: Initial open flow MCF/d Oil: Initial open flow 12,754 MCF/d Final open flow Time of open flow between initial and final tests N/A	zone depth (ft)_ low_N/ABl	7,016' TVD (T bl/d _{bl/d}	op)	
Static rock Pressure 3600 psig (surface pressure) at	fterHou	rs	!	OF 201
Second producing formation Pay zo Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) as	w Bb	1		OFFICE OF OIL & 1017 NOV 26 P WY DEFARTMENT ENVIRONMENTAL PROT
certify under penalty of law that I have personally examined	and am familiar	r with the infor	mation submitte	His document
ll the attachments and that, based on my inquiry of those indi	ividuals immedia	ately responsib	le for obtaining	He informations b
hat the information is true, accurates and complete				egue,

Were core samples taken? YesNo_X Were Electrical, Mechanical or Geophysical le This is a subsequent well. Antero only runs wireline logs on the first well on the subsequent well. Antero only runs wireline logs on the first well on the subsequent well. Antero only runs wireline logs on the first well on the subsequent well. Antero only runs wireline logs on the first well on the subsequent well.	ogs recorded on this well? If yes, pleas	
NOTE: IN THE AREA BELOW PUT	ogs recorded on this well? It yes, pleas	a list Yes – CBL.
NOTE: IN THE AREA BELOW PUT	on a multi-pad (Post East Unit 5H API# 47-033-05580). Please re	c 115t ference wireline logs submitted with Form WR-35 for Post East Unit 5H.
NOTE: IN THE AREA BELOW PUT		
	T THE FOLLOWING: 1). DETA	ILS OF PERFORATED INTERVALS
FRACTURING OR STIMULATING, PH	YSICAL CHANGE, ETC. 2). THE V	VELL LOG WHICH IS A SYSTEMATIC
DETAILED GEOLOGICAL RECORD COAL ENCOUNTERED BY THE WELL	BODE FROM SURFACE TO TOTA	AL DEPTH.
COAL ENCOUNTERED DI THE WEEL	BORD I ROW SORK HEZ TO 1011	
Perforated Intervals, Fracturing, or Stimulatin	ıg:	
Perforations: 8127'-14,874' MD (1416	3 holes)	
Frac'd w/ 10,584 gals 15% HCL Acid		ring 779,481# 100 mesh,
2,699,465# 40/70 and 1,672,304# 20		
2,033,405# 40/10 and 1,0/2,504# 20	,, 10 04114.	
Plug Back Details Including Plug Type and D	Depth(s): N/A	
		D D
Formations Encountered:	Top Depth /	Bottom Depth
Surface:		
Big Lime (est.)	1,586'	2,120'
Fifty Foot Sand (est.)	2,121'	2,247'
Gordon (est.)	2,248'	2,532'
Fifth Sandstone (est.)	2,533'	2,583'
Bayard (est.)	2,584'	3,239'
DOVOLU ICALI	2.240	3,467'
· · · · · · · · · · · · · · · · · · ·	3,240'	2,
Speechley (est.)	•	4,001'
Speechley (est.) Balltown (est.)	3,468'	•
Speechley (est.) Balltown (est.) Bradford (est.)	•	4,001'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.)	3,468' 4,002'	4,001' 4,578'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.)	3,468' 4,002' 4,579'	4,001' 4,578' 4,871'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.)	3,468' 4,002' 4,579' 4,872' 5,101'	4,001' 4,578' 4,871' 5,100'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.)	3,468' 4,002' 4,579' 4,872' 5,101' 5,629'	4,001' 4,578' 4,871' 5,100' 5,628'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.) Sycamore (est.)	3,468' 4,002' 4,579' 4,872' 5,101' 5,629' 6,298'	4,001' 4,578' 4,871' 5,100' 5,628' 6,297'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.) Sycamore (est.) Middlesex	3,468' 4,002' 4,579' 4,872' 5,101' 5,629' 6,298'	4,001' 4,578' 4,871' 5,100' 5,628' 6,297' 6,536'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.) Sycamore (est.) Middlesex West River Shale	3,468' 4,002' 4,579' 4,872' 5,101' 5,629' 6,298' 6,537' 6,607'	4,001' 4,578' 4,871' 5,100' 5,628' 6,297' 6,536' 6,606'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.) Sycamore (est.) Middlesex West River Shale Genundewa	3,468' 4,002' 4,579' 4,872' 5,101' 5,629' 6,298' 6,537' 6,607'	4,001' 4,578' 4,871' 5,100' 5,628' 6,297' 6,536' 6,606' 6,666'
Speechley (est.) Balltown (est.) Bradford (est.) Benson (est.) Alexander (est.) Elk (est.) Rhinestreet (est.) Sycamore (est.) Middlesex West River Shale Genundewa Burket Tully	3,468' 4,002' 4,579' 4,872' 5,101' 5,629' 6,298' 6,537' 6,607'	4,001' 4,578' 4,871' 5,100' 5,628' 6,297' 6,536' 6,606' 6,666'

DATE:	11/20/12
API#:	47-033-05450
	**UPDATED

Agent: CT Corporation System 13-3/8" 55# 496' 496' 689 Cu. Ft. Class Inspector: Tristan Jenkins 9-5/8" 36# 2529' 2529' 1030 Cu. Ft. Class	Farm name: I.L. Morris & Mike Ross, Inc.	Operator Well	No.: Reynolds l	Jnit 2H	
Latitude: 3803	LOCATION: Elevation: 1169'	_ Quadrangle: <u>V</u>	Volf Summit		
Latitude: 3803' Feet West of 80 Deg. 26 Min. 00 Sec.	District: Coal		on		_ _ _
Company: Antero Resources Appalachian Corp. Address: 1625 17th Street	Latitude: 3603' Feet South of 39 Deg				
Casing & Tubing Casing & C	Longitude 10,926 Feet West of 80 Deg	<u>g. 25</u> Min.	, <u>oo</u> Sec	:.	
Address: 1625 17th Street Tubing Denver, CO 80202 20" 94# 40' 40' 38 Cu. Ft. Class	Company: Antero Resources Appalachian Corp.		T	Ιτ - Ω :11	Coment fill
Agent: CT Corporation System Inspector: Tristan Jenkins Date Permit Issued: 7/22/2010 Date Well Work Commenced: 12/22/2010 Date Well Work Completed: 5/09/2011 Verbal Plugging: N/A Date Permission granted on: N/A Rotary	Address: 1625 17th Street	-		Len in well	up Cu. Ft.
Agent: CT Corporation System 15-3/8 36# 2529' 2529' 1030 Cu. Ft. Class		20" 94#	40'	40'	38 Cu. Ft. Class A
Inspector: Tristan Jenkins	Agent: CT Corporation System	13-3/8" 55#	496'	496'	689 Cu. Ft. Class A
Date Permit Issued: 7/22/2010 Date Well Work Commenced: 12/22/2010 Date Well Work Completed: 5/09/2011 Verbal Plugging: N/A Date Permission granted on: N/A Rotary		9-5/8" 36#	2529'	2529'	1030 Cu. Ft. Class A
Date Well Work Commenced: 12/22/2010 Date Well Work Completed: 5/09/2011 2-3/8" 4.7# 7131' Verbal Plugging: N/A Date Permission granted on: N/A Rotary Cable Rig Total Vertical Depth (ft): 7063' TVD Total Measured Depth (ft): 14,109' MD, 6892' TVD (BHL) Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow 10,716 MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 3800 psig (surface pressure) after Hours Second producing formation Pay zone depth (ft) Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Final open flow between initial and final tests Hours		5-1/2" 20#	14,096'	14,096'	3470 Cu. Ft. Class H
Date Well Work Completed: 5/09/2011 2-3/8" 4.7# 7131' Verbal Plugging: N/A N/A Date Permission granted on: N/A Rotary					
Verbal Plugging: N/A Date Permission granted on: N/A Rotary ✓ Cable Rig Total Vertical Depth (ft): 7063' TVD Total Measured Depth (ft): 14,109' MD, 6892' TVD (BHL) Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 10,716 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Bbl/d Final open flow MCF/d Final open flow Bbl/d	510010044	2-3/8" 4.7#	7131'		
Date Permission granted on: N/A Rotary	N/A				
Total Vertical Depth (ft): 7063' TVD Total Measured Depth (ft): 14,109' MD, 6892' TVD (BHL) Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Hours Second producing formation Pay zone depth (ft) Bbl/d Final open flow MCF/d Final open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d					
Total Vertical Depth (ft): 7063' TVD Total Measured Depth (ft): 14,109' MD, 6892' TVD (BHL) Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours					
Total Measured Depth (ft.): 14,109' MD, 6892' TVD (BHL) Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 3800 psig (surface pressure) after Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours					
Fresh Water Depth (ft.): 90' Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 10,716 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours	Total Vertical Depai (16):	L)			
Salt Water Depth (ft.): est. 1123', 1963' Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Time of open flow	Total Wester Dorth (A): 90'				
Is coal being mined in area (N/Y)? N Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Pay zone depth (ft) Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Second producing formation Pay zone depth (ft) Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours	1				
Coal Depths (ft.): Deepest known coal seam mined at surface Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation	bar was 20pm (10)				
Void(s) encountered (N/Y) Depth(s) N, N/A OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formationMarcellus	Coal Dombo (e.). Deenest known coal seam	mined at surfa	ace		
OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet) Producing formation Marcellus Pay zone depth (ft) 7025' TVD (Top) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 3800 psig (surface pressure) after Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours					
Producing formation Marcellus Pay zone depth (ft) 7023 175 (1057) Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flow between initial and final testsHours Static rock Pressure 3800 psig (surface pressure) afterHours Second producing formationPay zone depth (ft) Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours				1	ahaat)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 10,716 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 3800 psig (surface pressure) after Hours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours	OPEN FLOW DATA (If more than two producing forms	ations please incl	nde additional 7025' TVD	data on separate (Top)	e silect)
Final open flow 10,716 MCF/d Final open flowBbl/d Time of open flow between initial and final testsHours Static rock Pressure 3800 psig (surface pressure) afterHours Second producing formationPay zone depth (ft) Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours	Producing formation Waldends Fa	n flow I	3bl/d		
Time of open flow between initial and final testsHours Static rock Pressure 3800psig (surface pressure) afterHours Second producing formationPay zone depth (ft) Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours	Final open flow 10,716 MCF/d Final open f	low ——— B	bl/d		
Static rock Pressure 3800 psig (surface pressure) afterHours Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours					
Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours		after Ho	urs		
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours		(0)			
Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours	Social producting states and states and states are states as a second state and states are states are states as a second state and states are states are states are states as a second state and states are states are states are states as a second state and states are states				
Time of open flow between initial and final testsHours	Gas: Initial open flow MCF/d Oil: Initial ope	n ilow			RC P
Time of open now octrosis and annual and annual and annual	Final open flow MCF/d Final open i	IOWL	re		
Static rock Pressurepsig (surface pressure) afternon-	Time of open flow between initial and final tests_				型 7
· · · · · · · · · · · · · · · · · · ·					PAR 6
I CAMITY HIME RENAMY OF IAW MIGHT MAYO POLICIAMY CHAMITY CHAMITY CONTROL OF THE C	all the attachments and that, based on my inquiry of those is	ndividuals immed	diately respons	ible for obtainin	ng fine Information
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this specural the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information	that the information is true, accurate, and complete.	Λ			8

Were core samples taken? Yes?	No_X Were cuttings ca	aught during drilling? YesNo_X
Warra Floring Machanical or Geonbusi	cal logs recorded on this well? If yes, pleas	se list Yes, CBL.
This is a subsequent well. Antero only runs wireline logs on the fin	st well on a multi-pad (Reynolds Unit 1H API# 47-033-05450). Please n	eference wireline logs submitted with Form WR-35 for Reynolds Unit 1H.
FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECO	, PHYSICAL CHANGE, ETC. 2). THE $^{ extstyle	AILS OF PERFORATED INTERVALS, WELL LOG WHICH IS A SYSTEMATIC OF ALL FORMATIONS, INCLUDING AL DEPTH.
Perforated Intervals, Fracturing, or Stimu	lating:	
Perforations: 7163' – 14,030' MD		
	cid, 116,151 bbls Slick Water carry	ing 537,000# 100 mesn,
2,500,800# 40/70 and 1,583,600#	‡ 20/40 sand.	
		A ARTHUR AND A SECTION OF THE SECTIO
Plug Back Details Including Plug Type a	nd Depth(s):	
Formations Encountered: Surface:	Top Depth /	Bottom Depth
<u>Surrace:</u>		
Big Lime	1,448'	1,529'
Big Injun	1,530'	1,907'
Gantz Sand	1,908'	2,018'
Fifty Foot Sand	2,019'	2,160'
Gordon	2,161'	2,431'
Fifth Sandstone	2,432'	3,122'
Speechley	3,123'	3,335'
Balltown	3,336'	3,850'
Bradford	3,851'	4,461'
Benson	4,462'	4,806'
Alexander	4,807'	5,037'
Elk	5,038'	5,644'
Rhinestreet	5,645'	6,355'
Sycamore	6,355'	6,632'
Sycamore Shale	6,633'	6,823'
Tully	6,824'	6,948'
Hamilton	6,949'	7,024'
Marcellus	7,025'	7,063' TVD
•		

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/29/2012
API #:	47-033-05581

ION: Elevation: 1190'	_ Quadrangle: <u>V</u>	olf Summit		
District: Coal	County: Harris	on		<u>-</u>
Latitude: 7.457 Feet South of 39 Deg.	20 Min.	00 Sec		
Longitude 9,144 Feet West of 80 Deg	. <u>22</u> Min.	30 Sec	.	•
Company: Antero Resources Appalachian Corp	10	Used in	Left in well	Cement fill
1625 17th Street	Casing & Tubing	drilling	Len III well	up Cu. Ft.
Address: Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
CT Commention Country	13-3/8" 48#	500'	500'	695 Cu. Ft. Class A
Agent: CT Corporation System	9-5/8" 36#	2565'	2565'	1044 Cu. Ft. Class A
Inspector: Tristan Jenkins			14,165'	3475 Cu. Ft. Class H
Date Permit Issued: 12/01/2011	5-1/2" 20#	14,165'	14,103	
Date Well Work Commenced: 12/16/2011				
Date Well Work Completed: 04/22/2012	2-3/8" 4.7#	7110'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7021' TVD				
Total Measured Depth (ft): 14,165' MD, 6,999' T	VD (BHL)			
4001 4501				
riesii water Deptii (16).				
Sait Water Depth (10.)				
Is coal being mined in area (N/Y)? N		+		
Coal Depths (ft.): Pad on PGH strip bench		 		
Void(s) encountered (N/Y) Depth(s) N, N/A	l			
EN FLOW DATA (If more than two producing forms	tions please incl	ude additional	data on separate	; sheet)
Producing formation Marcellus Pa	y zone depth (ft)	0,372 100 (1	op)	
Gas: Initial open flow MCF/d Oil: Initial open	n flow N/AE	3bl/d		
Final open flow 7095 MCF/d Final open fl		bl/d		
Time of open flow between initial and final tests N	/A Hour		•	E ~ 0
Static rock Pressure 3300 psig (surface pressure)	afterHo	urs		VIR.
Second producing formationPay	zone depth (ft)_			2012 NOV 30
Gas: Initial open flowMCF/d Oil: Initial ope		Bbl/d		
	lowE	3bl/d		5 O
Time of open flow between initial and final tests_	Hou			70 m
Static rock Pressurepsig (surface pressure ify under penalty of law that I have personally examinating of those if)after HC	ours		70 TO 10 TO

eve that the information is true, accurate, and complete.

Were core samples taken? Yes	No_X Were	cuttings caught during drilling	g? YesNo_X
		Yes - CBL	
Were Electrical, Mechanical or Geophy This is a subsequent well. Antero only runs wireline logs on t	sical logs recorded on this well? I	Tyes, please reference wireline logs submitt	ed with Form WR-35 for Marsh Unit 1H.
This is a subsequent well. Antero only runs whethe logs on t	ne inst wen on a montpee (warsh out 11176 in 47-556		
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL REC COAL ENCOUNTERED BY THE	G, PHYSICAL CHANGE, ETC. ORD OF THE TOPS AND B	OTTOMS OF ALL FORM	Cuidagidiemair
Perforated Intervals, Fracturing, or Stir	nulating:		
Perforations: 7,147' - 14,100' M	D (1,776 holes)	704 000#4	100 mach
Frac'd w/ 11,000 gals 15% HCL	Acid, 148,278 bbls Slick W	ater carrying 731,300#	luu mesn,
3,378,500# 40/70 and 2,295,60	0# 20/40 sand.		
Plug Back Details Including Plug Type	e and Denth(s): NI/A		
	- N/A		
			Dottom Donth
Formations Encountered:	Top Depth		Bottom Depth
Surface:			
	4.0471	1 041!	
Gantz Sand	1,847'	1,941'	
Fifty Foot Sandstone	1,942'	2,144'	
Gordon	2,145'	2,375'	
Fifth Sand	2,376'	2,613'	
Bayard	2,614'	3,077'	
Speechley	3,078'	3,304'	
Balltown	3,305'	3,779'	
Bradford	3,780'	4,455'	
Benson	4,456'	4,722'	
Alexander	4,723'	4,976'	
Elk	4,977'	6,250'	
Sycamore	6,251'	6,541'	
Middlesex	6,542'	6,678'	
Genundewa	6,679'	6,721'	
Burket	6,722'	6,749'	
Tully	6,750'	6,882'	
Hamilton	6,883'	6,971'	
Marcellus	6,972'	7,021' TVD	
17161-0611-06			

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/29/2012	
API #:	47-033-05577	

rm name: Sperry, Clarence E., Janet L., and L. Diane	Operator Well	No.: GT Post Ur	nit 2H	
OCATION: Elevation: 1169'	Quadrangle:	Vest Milford		
District: Union Latitude: 2310 Feet South of 39 Deg.		00 Sec		
Longitude 4375 Feet West of 80 Deg. Company: Antero Resources Appalachian Corp	27Min.	Sec	•	
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	30" 94#	20'	20'	43 Cu. Ft. Class A
Agent: CT Corporation System	20" 94#	60'	60'	58 Cu. Ft. Class A
Inspector: Tristan Jenkins	13-3/8" 48#	533'	533'	761 Cu. Ft. Class A
Date Permit Issued: 9/20/2011	9-5/8" 36#	2559'	2559'	1055 Cu. Ft. Class A
Date Well Work Commenced: 10/11/2011	5-1/2" 20#	12,524'	12,524'	3019 Cu. Ft. Class H
Date Well Work Completed: 1/20/2012				
Verbal Plugging: N/A	2-3/8" 4.7#	7086'		
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,015' TVD				
Total Measured Depth (ft): 12,535' MD, 6,921' TV	D (BHL)			
Fresh Water Depth (ft.): 50', 75'				
Salt Water Depth (ft.): 610'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): Pad on PGH strip bench. Sealed coal m	ine 1,850' to the	NW of pad.	1	
Void(s) encountered (N/Y) Depth(s) N,N/A				
ODEN ELOW DATA (If more then two producing formati	zone depth (ft) flow N/A B	ide additional d 6,974' TVD (Te bl/d bl/d	ata on separate op)	sheet)
Time of open flow between initial and final tests N/A Static rock Pressure 3600 psig (surface pressure) a	Hours		ENVIKUA	OFFICE 2012 NO
Second producing formation Pay 20 Gas: Initial open flow MCF/d Oil: Initial open Final open flow MCF/d Final open flo Time of open flow between initial and final tests	wB	Bbl/d bl/d s	27 T	REFICE OF OIL & GA

l certify under penalty of law that I have personally examined and am tamiliar with the information submitted in this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Cionatura

Date

Were core samples taken? YesN	No X Were c	cuttings caught during drilling? Yes	No_X
Were Electrical, Mechanical or Geophysic This is a subsequent well. Antero only runs wireline logs on the	cal logs recorded on this well? If	yes, please list 165 000	WR-35 for Post Unit 2H.
This is a subsequent well. Antero only runs wireline logs on the	tirst well on a multi-pad (Post Ottil 24 API# 47-035-C	50492). I 6230 Idialano William III	
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE WI	PHYSICAL CHANGE, ETC. 2 RD OF THE TOPS AND BO	THE WELL LOG WHICH IS A DITTOMS OF ALL FORMATIONS	SISIEMMIN
Perforated Intervals, Fracturing, or Stimu	lating:		
Perforations: 7197' - 12,417' MD (1320 holes)		
Frac'd w/ 8,000 gals 15% HCL Ac	id, 123,444 bbls Slick Wate	er carrying 591,300# 100 mesh	,
2,657,200 # 40/70 and 1,788,100	· · · ·		

Plug Back Details Including Plug Type a	nd Depth(s): N/A		
Formations Encountered:	Top Depth	/ Botto	m Depth
Surface:			
Gordon	2,147'	2419'	
Fifth Sandstone	2,420'	2468'	
Bayard	2,469'	3143'	
Speechley	3,144'	3362'	
Balltown	3,363'	3853'	
Bradford	3,854'	4437'	
Benson	4,438'	4735'	
Alexander	4,736'	4825'	
Elk	4,826'	6300'	
	_	(277)	

6,301'

6,3781

6,656'

6,575'

6,711'

6,755'

6,781'

6,903'

6,974'

Sycamore

Middlesex

Genundewa

West River Shale

Sonyea

Burket

Hamilton

Marcellus

Tully

6377'

6655'

6574'

6710'

6754'

6780'

6902'

6973'

7015' TVD

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/29/2012	
API#:	47-033-05576	

Farm name: Sperry, Clarence E., Janet L., and Diane	Operator Well	No.: GT Post U	nit 1H		
LOCATION: Elevation: 1169'	_ Quadrangle: <u>V</u>	est Milford			
District: Union	County: Harris	on			
Latitude: 2320 Feet South of 39 Deg.	15 Min.	<u>00</u> Sec			
Longitude 4370 Feet West of 80 Deg.	Min.	30 Sec).		
Company: Antero Resources Appalachian Corp					
Company: Affecto Resources Apparacinan Corp	Casing &	Used in	Left in well	Cement fill	
Address: 1625 17th Street	Tubing	drilling		up Cu. Ft.	
Denver, CO 80202	20" 94#	60'	60'	58 Cu. Ft. Class A	
Agent: CT Corporation System	13-3/8" 48#	475'	475'	660 Cu. Ft. Class A	
Inspector: Tristan Jenkins	9-5/8" 36#	2525'	2525'	1028 Cu. Ft. Class A	
Date Permit Issued: 09/20/2011	5-1/2" 20#	13,255'	13,255'	3290 Cu. Ft. Class H	
Date Well Work Commenced: 9/27/2011					
Date Well Work Completed: 1/13/2012	2-3/8" 4.7#	7040'			
Verbal Plugging: N/A					
Date Permission granted on: N/A					
Rotary Cable Rig					
Total Vertical Depth (ft): 7,020' TVD					
Total Measured Depth (ft): 13,255' MD, 6,926' To	VD (BHL)				}
Fresh Water Depth (ft.): 60' Salt Water Depth (ft.): 2125'					1
Out Water Dept. (111)	 		1		1
Is coal being mined in area (N/Y)? N Coal Depths (ft.): Pad on PGH strip bench. Sealed coal to	mine 1.850' to the	NW of pad.			1
	111111111111111111111111111111111111111				1
Void(s) encountered (N/Y) Depth(s) N, N/A					7
OPEN FLOW DATA (If more than two producing format	tions please inclu	ide additional	data on separate	sheet)	
Producing formation Marcellus Pay	y zone depth (ft)		, op)		
Gas: Initial open flow MCF/d Oil: Initial open Final open flow 8.278 MCF/d Final open flow	ow N/A B	sbl/d bl/d			
Final open flow 8,278 MCF/d Final open flow between initial and final tests N/					
Static rock Pressure 3600 psig (surface pressure)	after Hor				
				盟 . 0	,
Occord producting retirement	zone depth (ft)	N-1/4		VIR.	1
Gas: Initial open flowMCF/d Oil: Initial open		3bl/d .bl/d			320
Final open flow MCF/d Final open flow					, m
Time of open flow between initial and final tests	after Ho			30 130	
				this Tours	
I certify under penalty of law that I have personally examine	ed and am famili	ar with the info	ormation submit	a the information of	Hbelie
all the attachments and that, based on my inquiry of those in	idividuals immed	natery respons	TOTE TOT OURTHIN	P ddd (1410 c)))
that the information is true, accurate, and complete.					

Signature

Were core samples taken? Yes	No Were o	cuttings caught during drilling	ig? Yes INO
Were Electrical, Mechanical or Geoph	weight look recorded on this well? If	ves please list Yes- CBL	
This is a subsequent well. Antero only runs wireline logs of	in the first well on a multi-pad (Post Unit 2H API# 47-033-	05492). Please reference wireline logs subn	hitted with Form WR-35 for Post Unit 2H.
NOTE: IN THE AREA BELOVERACTURING OR STIMULATING DETAILED GEOLOGICAL RECOUNTERED BY THE	NG, PHYSICAL CHANGE, ETC. 1 CORD OF THE TOPS AND BO	2). THE WELL LOG WH OTTOMS OF ALL FOR	ICH IS A SYSTEMATIC
Perforated Intervals, Fracturing, or St	-		
Perforations: 7244' - 13,185' M			
Frac'd w/ 9,500 gals 15% HCL	Acid, 137,342 bbls Slick Water	er carrying 656,100# 1	uu mesn,
3,143,900 # 40/70 and 2,048,6	00# 20/40 sand.	<u>. </u>	
Plug Back Details Including Plug Typ	pe and Depth(s): N/A		
Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			
Fifty Foot Sandstone	2,004'	2,146'	
Gordon	2,147'	2,417'	
Fifth Sandstone	2,418'	2,467'	
Bayard	2,468'	3,142'	
Speechley	3,143'	3,360'	
Balltown	3,361'	3,855'	
Bradford	3,856'	3,855'	
Benson	4,433'	4,432'	
Alexander	4,733'	4,822'	
Elk	4,823'	6,273'	
Sycamore	6,274'	6,560'	
Middlesex	6,561'	6,561'	
Sonyea	6,562'	6,655'	
West River Shale	6,656'	6,750'	
Genundewa	6,751'	6,779'	
Tully	6,780'	6,901'	
Hamilton	6,902'	6,972'	
Marcellus	6,973'	7,020' TVD	

DATE:	11/26/2012	
API#:	47-033-05559	

Farm name: Matheny, C Norman Matheny & Wandal	Operator Well	No.: Nelson Un	t 1H		
LOCATION: Elevation: 1273'	Quadrangle: West Milford				
District: Union	County: Harris	on			
Latitude: 3617 Feet South of 39 Deg.		00 Sec	•		
Longitude 973 Feet West of 80 Deg.	25 Min.	00 Sec	•		
Company: Antero Resources Appalachian Corp					
1625 17th Street	Casing &	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Address: Denver, CO 80202	Tubing 20" 94#	40'	40'	38 Cu. Ft. Class A	
CT C	13 3/8" 55#	483'	483'	671 Cu. Ft. Class A	
Agent	9 5/8" 36#	2,526'	2,526'	1028 Cu. Ft. Class A	
Inspector: I ristan Jenkins Date Permit Issued: 7/11/2011, 12/2/2011 (Permit Mod)		14,258'	14,258'	3514 Cu. Ft. Class H	
			<u> </u>		
Date Well Work Commenced: 12/8/2011	2 3/8" 4.7#	6,701'			
Date well work Completed.	1 20,0 "				
Verbal Plugging: N/A Date Permission granted on: N/A					
Date I climssion granted on:					
	 				
Total Vertical Depth (ft): 6755' TVD Total Measured Depth (ft): 15,647' MD					
Fresh Water Depth (ft.): Drilled surface casing sec	tion with fres	hwater. No in	dications of w	ater influx.	
Salt Water Depth (ft.): est. 815'					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): Deepest known coal seam mined at surface					
Void(s) encountered (N/Y) Depth(s) N, N/A					
		1	lete en concrete	chaet)	
OPEN FLOW DATA (If more than two producing formati	zone depth (ft)	ide additional (6733' TVD (T	iata on separate on)	Silect)	
		bl/d			
Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow	w N/A RI	bl/d			
Time of open flow between initial and final tests N/A					
Static rock Pressure ³⁶⁰⁰ psig (surface pressure) a	fter Hou				
Second producing formation Pay zo					
Gas: Initial open flow MCF/d Oil: Initial open flow		Bbl/d bl/d	EN	2 0	
Gas: Initial open flowMCF/d Oil: Initial open flowBbl/d Final open flowMCF/d Final open flowBbl/d Time of open flow between initial and final testsHours Static rock Pressure psig (surface pressure) afterHours					
Static rock Pressurepsig (surface pressure) a	ıfter Ho		<u> </u>		
		ish sha in£a	<u> </u>		
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those ind	l and am familia ividuals immed	ır with the info iately resnonsi	ble for obtaining	the information belie	
all the attachments and that, based on my inquiry of those industrial that the information is true, accurate, and complete.	i viduais illiliicu	reoponsi	ਲ	ם ֶּ ד	
Shown West	1,000		ปาวเสีย	SAD 7	
Signature	me~		Date Ca	¥ ¥ 55	

		v
>	Were cuttings caught	during drilling? Yes X No
Vere core samples taken? YesNo_>		CDI
Vere core samples taken? Tes	logs recorded on this well? If yes, please list	e wireline logs submitted with Form WR-35 for Hawker Unit 1H
Vere Electrical, Mechanical of Cooperation of State of St	ill on a multi-pad (Hawker Unit 1H API# 47-033-03333). 1 1000	
1183 15 0 55577		INTERVALS
NOTE: IN THE AREA BELOW PU FRACTURING OR STIMULATING, PI DETAILED GEOLOGICAL RECORD COAL ENCOUNTERED BY THE WEL	AND DIVIDING UP	
Perforated Intervals, Fracturing, or Stimulat		
Perforations: 7,179'-14,192' (1440h	oles)	ng 836 393# 100 mesh,
Frac'd w/ 10 500 gals 15% HCL Ac	old, 156,009 bbis client trans-	ig 000,000
3,147,873# 40/70 and 1,875,536# 2	20/40 sand.	
3,147,873# 40/70 and 1,675,556/7.		
Plug Back Details Including Plug Type an	d Depth(s): N/A	
Plug Back Details including 1189 11		
	,	Bottom Depth
. Europetared	Top Depth /	
Formations Encountered:		1,573'
Surface:	1,458'	1,968'
Big Lime (est.)	1,574'	2,119'
Big Injun (est.)	1,969'	2,388'
Fifty Foot Sand (est.)	2,120'	2,445'
Gordon (est.)	2,389'	3,089'
Fifth Sandstone (est.)	2,446'	3,301 [']
Bayard (est.)	3,090'	3,798'
Speechley (est.)	3,302'	3,798 4,398'
Balltown (est.)	3,799'	
Bradford (est.)	4,399'	4,707'
Benson (est.)	4,708'	4,924'
Alexander (est.)	4,925'	6,162'
Elk (est.)	6,163'	6,551'
Sycamore SS	6,552'	6,637'
Sonyea	6,638'	6,659'
West River	6,690	6,732'
Genundewa	6,733'	6,755' (TVD)
Genunae	0,755	

Burket

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11/26/2012
API #:	47-033-05629

Farm name: Sperry, Clarence	Operator Well	No.: Boring Uni	t 1H	
LOCATION: Elevation: 1166'	Quadrangle: <u>V</u>	Vest Milford		
District: Union Latitude: 10,004 Feet South of 39 Deg. Longitude 1098 Feet West of 80 Deg.		00 Sec		
Company: Antero Resources Appalachian Corp.				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	547'	547'	760 Cu. Ft. Class A
Inspector: Tristan Jenkins	9 5/8" 36#	2,580'	2,580'	1050 Cu. Ft. Class A
Date Permit Issued: 6/26/2012	5 1/2" 20#	16364'	16364'	4077 Cu. Ft. Class H
Date Well Work Commenced: 7/2/2012				
Date Well Work Completed: 8/31/2012	2 3/8" 4.7#	6599'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 6895' TVD				
Total Measured Depth (ft): 16,374' MD, 6,888 TVD (BHL)				
Fresh Water Depth (ft.): est. 102'				
Salt Water Depth (ft.): 843'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
Void(s) encountered (N/Y) Depth(s) N, N/A				
OPEN FLOW DATA (If more than two producing formati	zone depth (ft) flow N/A B w N/A Bb Hours	bl/d bl/d s	op)	
Second producing formation Pay zo Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) a	wBl Hours		NOM FIRST	OFFICE OF OIL & 2012 NOV 27 P WV DEPARTMENT

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information is true, accurate, and complete.

Mura Pedicar

Were core samples taken?	YesX No	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanica	ıl or Geophysical logs record	ed on this well? If yes, please list CBL
This is a subsequent well. Antero only run	is wireline logs on the first well on a multi-pad	(Scott Unit 3H API# 47-033-05503). Please reference wireline logs submitted with Form WR-35 for Scott Unit 3H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7,135'-16,299' (1848 holes)	
Frac'd w/ 15,162 gals 15% HCL Acid, 188,594 bbls Slickwater carrying 981,020# 100 mesh,	
3,552,180# 40/70 sand and 2,206,673# 20/40 sand.	

Plug Back Details Including Plug Type and Depth(s): N/A	•

Top Depth /	Bottom Depth
'	1
' 1,859)1
'	ı
2,104	!
2,369)¹
)' 3,069)'
) ['] 3,293	3'
3,800)'
.' 4,398	3'
' 4,770	ı
' 4,993	ı
5,639	ı
6,204	ı
6,277	1
6,549	ı
6,643	l
6,670	1
' 6,788	
6,862	
6,895	S' TVD
	1,551 1,859 1,963 2,104 2,369 3,069 3,293 4,398 4,770 4,993 5,639 6,204 6,277 6,549 6,643 6,670 6,788

DATE:	11/26/2012
API #:	47-033-05580

n name: Williams, Betty Ann	Operator Well	No.: Post East	Unit 5H	
CATION: Elevation: 1215'	_ Quadrangle: <u>W</u>	/olf Summit		
District: Tenmile	County: Harrise			<u>.</u>
Latitude: 3,413 Feet South of 39 Deg.				
Longitude 8.866 Feet West of 80 Deg	g. <u>27</u> Min.	30 Sec	C.	
Company: Antero Resources Appalachian Corp				
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft Class A
Agent: CT Corporation System	13-3/8" 54.5#	551'	551'	765 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2533'	2533'	1031 Cu. Ft. Class A
Date Permit Issued: 1/6/2012	5-1/2" 20#	17,005'	17,005'	4267 Cu. Ft. Class H
Date Well Work Commenced: 2/22/2012				
Date Well Work Completed: 8/21/2012	2-3/8" 4.7#	7137'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Vertical Depth (ft): 7,043' TVD				
Total Measured Depth (ft): 17,005' MD				
Fresh Water Depth (ft.): 20', 23', 40', 45', 50'				
Salt Water Depth (ft.): 1,510'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 116', 196', 221'				<u> </u>
Void(s) encountered (N/Y) Depth(s) No, N/A				
OPEN FLOW DATA (If more than two producing formated Producing formation Marcellus Pay Gas: Initial open flow MCF/d Oil: Initial open Final open flow MCF/d Final open flow Time of open flow between initial and final tests N//	y zone depth (ft)_ flow N/A Bl ow N/A Bb A Hours	6,954° IVD (bl/d bl/d	data on separate Top)	sheet) 2012 NO WY DI ENVIRONM
Static rock Pressure 3600 psig (surface pressure)				
Second producing formationPay 2	cone depth (ft)	——— bl/d		Z NON
Second producing formationPay z Gas: Initial open flowMCF/d Oil: Initial open	cone depth (ft)B	 bl/d bl/d		VY DEPAR
Second producing formationPay 2	cone depth (ft)B	ol/d		IZ NOV 27 PONMENTAL PRO

Were core samples taken? Yes	No X Were cutti	ings caught during drilling? YesNo_X
		s, please list Yes - CBL, Dual Laterolog/Caliper/Gamma Ray,
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING	, PHYSICAL CHANGE, ETC. 2). 7 PRD OF THE TOPS AND BOTT	DETAILS OF PERFORATED INTERVALS THE WELL LOG WHICH IS A SYSTEMATIO OMS OF ALL FORMATIONS, INCLUDING TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stim	_	
Perforations: 7325'-16,936' MD (
Frac'd w/ 17,368 gals 15% HCL /	Acid, 205,021 bbls Slick Water	carrying 1,072,995# 100 mesh,
3,984,655# 40/70 and 2,399,366	# 20/40 sand.	
Plug Back Details Including Plug Type a	and Depth(s): N/A	
Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Big Lime	1,586'	2,120¹
Fifty Foot Sand	2,121'	2,247'
Gordon	2,248'	2,532'
Fifth Sandstone	2,533'	2,583'
Bayard	2,584'	3,239' 3,467'
Speechley	3,240' 3,468'	4,001'
Balltown	4,002'	4,578'
Bradford	4,579'	4,871'
Benson Alexander	4,872'	5,100'
Elk	5,101'	5,628'
Rhinestreet	5,629'	6,297'
	6,298'	6,558'
Sycamore Middlesex	6,559'	6,564'
	6,565'	6,640'
Sonyea West River Shale	6,641'	6,703'
Genundewa	6,704'	6,735'
	6,736'	6,761'
Burkett Tully	6,762'	6,953'
Marcellus	6,954'	7,043' TVD
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	-

DATE:	11/26/2012
API #:	47-017-05962 D

n name: Dotson, Rendal J. & Sandra	Operator Well No.: R. Swiger South Unit 1H			
CATION: Elevation: 880'	Quadrangle: F	olsom 7.5'		
District: McClellan	County: Doddr			
Latitude: 10,377 Feet South of 39 Deg.				
Longitude 11,026 Feet West of 80 Deg.	32 Min.	Sec.	•	
Company: Antero Resources Appalachian Corp				T
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	26" 273#	25'	25'	Sand in 49 Cu. Ft.
Agent: CT Corporation System	20" 94#	80'	80'	77 Cu. Ft. Class A
Inspector: Sam Ward	13 3/8" 54.5#	378'	378'	525 Cu. Ft. Class A
Date Permit Issued: 6/7/2010, 6/6/2011 (Drill Deeper Permit	9 5/8" 40#	2,725'	2,725'	1110 Cu. Ft. Class A
Date Well Work Commenced: 6/16/2010	5 1/2" 20#	13,435'	13,435'	3228 Cu. Ft. Class H
Date Well Work Completed: 6/1/2012				
Verbal Plugging: N/A				
Date Permission granted on: N/A	2 3/8" 4.7#	6994'		
Rotary Cable Rig				
Total Vertical Depth (ft): 7046' TVD				
Total Measured Depth (ft): 13435' MD				
Fresh Water Depth (ft.): 15', 155'				
Salt Water Depth (ft.): 1050'				
Is coal being mined in area (N/Y)? N				_
Coal Depths (ft.): est. 138', 253', 411', 482', 520'				
Void(s) encountered (N/Y) Depth(s) N, N/A	<u></u>			_ <u></u>
Gas: Initial open flowMCF/d Oil: Initial open	zone depth (ft) <u>6</u> flow_N/AB	de additional d 5927' TVD (To bl/d bl/d	ata on separate p)	sheet)
Final open flow 4311 MCF/d Final open flo Time of open flow between initial and final tests N/A				_
Static rock Pressure 3800 psig (surface pressure) a				OFFIC 2012 NI BUYEN
	1 .1 (0)		:	
Second producing formation Pay zo Gas: Initial open flow MCF/d Oil: Initial open	one depth (ft)	bl/d		
CYSC INTRI OREN LOW VIC.F/G CH. HILLALODELL		bl/d		유 27
• • • • · · · · · · · · · · · · · · · ·	w BI	01/U		
Final open flow MCF/d Final open flo Time of open flow between initial and final tests			į	ם פו

Were core samples taken? Yes	No_X w	ere cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geopl		1? If yes, please list CBL
FRACTURING OR STIMULATI	NG, PHYSICAL CHANGE, E' CORD OF THE TOPS AND	G: 1). DETAILS OF PERFORATED INTERVALS, IC. 2). THE WELL LOG WHICH IS A SYSTEMATIC BOTTOMS OF ALL FORMATIONS, INCLUDING CE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or St		
Perforations: 7,395'-13,368' (1		Motor carning 735 500# 100 mesh
		Water carrying 735,500# 100 mesh,
2,666,200# 40/70 and 1,603,5	000# 20/40 sand.	
Plug Back Details Including Plug Ty	pe and Depth(s): N/A	
Dtime Engantand	Top Depth	Bottom Depth
Formations Encountered: Surface:	100 Ֆերևո	1 200000
2. 3.,		
Big Lime	1,765'	1,841'
Big Injun	1,842'	2,302'
Gantz Sand	2,303'	2,416'
Fifty Foot Sand	2,417'	2,505'
Gordon	2,506'	2,826'
Fifth Sandstone	2,827'	2,850'
Bayard	2,851'	3,618'
Speechley	3,619'	4,047'
Balltown	4,048'	4,314'
Bradford	4,315'	4,786'
Benson	4,787'	5,138'
Alexander	5,139'	5,306'
Elk	5,307'	5,953'
Rhinestreet	5,954'	6,397'
Sycamore SS	6,398'	6,618'
Middlesex	6,619'	6,776'
Burket	6,777'	6,802'
Tully	6,803'	6,883'
Hamilton	6,884'	6,926'
Marcellus	6,927'	7,046' TVD

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	8-16-2012	
API #:	47-051-01277	

ame: McDowell B 8H TION: Elevation: 1356'	Operator Well Quadrangle:			_
SCATION. Elevation.		vincyvinc		
District: Meade	County: Mars			
Latitude: 1247' Feet South of 39 Deg. Longitude 4609' Feet West of 80 Deg.				
Longitude 4609 Feet West of 80 Deg.	IVIII		ю.	
Company. Chesapeake Appalachia, L.L.C.				
P.O. Box 18496	Casing &	Used in	Left in well	Cement fill
Address: 1.0. Box 18470	Tubing 13 3/8"	drilling 1206'	1206'	up Cu. Ft.
Oklahoma City, OK 73154-0496	13 3/6	1200	1200	1439 Cu. 1 t
Agent: Eric Gillespie			 	<u> </u>
Inspector: Derek Haught	!	<u> </u>		
Date Permit Issued: 6-15-2009				
Date Well Work Commenced: 8-8-2009				
Date Well Work Completed: 8-20-2009				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 1206' (cement plug @890'-1141')				
Total Measured Depth (ft): 1206				
Fresh Water Depth (ft.): 360'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 275', 1065'				
Void(s) encountered (N/Y) Depth(s) N EN FLOW DATA (If more than two producing formations)	one places incl	ude additional	data on separate	sheet)
	zone depth (ft)		aum on Departure	
Gas: Initial open flowMCF/d Oil: Initial open f	-	Bbl/d		
Final open flow N/A MCF/d Final open flow		bl/d		Allen
Time of open flow between initial and final tests N/A				
Static rock Pressure N/A psig (surface pressure) at	fterHo	ırs		
Second producing formationPay zo	ne depth (ft)		الارادي. معني الخوي	ANG LE 2012
Gas: Initial open flow MCF/d Oil: Initial open f		Bbl/d		5 7 7 7 TO
Final open flow MCF/d Final open flow	wB	bl/d	○	Will "
Time of open flow between initial and final tests				
Static rock Pressure psig (surface pressure) a	fter Ho	ırs		- C

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe

8-16-2012 Date

Marline Williams
Signature

that the information is true, accurate, and complete.

Were core samples taken? YesN	No Were c	uttings caught during drilling? Yes	No
Were Electrical, Mechanical or Geophysic	cal logs recorded on this well? If	yes, please list	
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE WI	PHYSICAL CHANGE, ETC. 2 RD OF THE TOPS AND BO	2). THE WELL LOG WHICH IS A S TTOMS OF ALL FORMATIONS,	SYSTEMATI
Perforated Intervals, Fracturing, or Stimu	lating:		
Plug Back Details Including Plug Type a	nd Depth(s): Cement plug @	0890' - 1141'; Shut well in	
Formations Encountered: Surface:	Top Depth	/ Bottom	<u>Depth</u>
SHALE/SS	0	275	
COAL	275	277	
SHALE/SS	277	1065	
COAL	1065	1067	-
SHALE/SS	1067	1140	
PITTSBURGH COAL	1140	1149	
SHALE/SS	1149	1206	
			· · · · · · · · · · · · · · · · · · ·

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State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11-28-2012	
API#:	47-085-09891	

Farm name: Heartwood Forestland F	Fund 3H	Operator	: Well No.: 832	2255	
LOCATION: Elevation: 907'		Quadrang	gle: Harrisville		
District: Murphy Latitude: 5405' Longitude 13610'	Feet South of 39 Deg. 10 Feet West of 81 Deg. 05	0	Ritchie Min. ⁰⁰ Min. ⁰⁰	Sec.	

Chesaneake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	Driven
Agent: Eric Gillespie	13 3/8"	339'	339'	359 Cu. Ft.
Inspector: David Cowan	9 5/8"	2311'	2311'	1038 Cu. Ft.
Date Permit Issued: 7-30-2010	5 1/2"	6114'	6114'	4210 Cu. Ft
Date Well Work Commenced: 9-12-2011			0114	1 42 10 Cu. Ft
Date Well Work Completed: 10-6-2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6119'				
Total Measured Depth (ft): 6119 Vertical	well Der	m will	A MA S	
Fresh Water Depth (ft.): 200'	DOLL PE	1.1 00000	C/LS	
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing for	mations please include addition	anal data on separate shoot
1 roducing formation wareands	Pay zone denth (ft) 5,945'-5,947'	onar data on separate sneet)
Gas: Initial open flow MCF/d Oil: Initial or	en flow Bhi/d	
Final open flow Not Tested MCF/d Final open	flow Bbl/d	
Time of open flow between initial and final tests	Hours	The Control of the Co
Static rock Pressurepsig (surface pressur		Uffice of Oil & Gas
Second producing formationPa	y zone depth (ft)	
Gas: Initial open flowMCF/d Oil: Initial op	en flow Bbl/d	DEC 0 & 2012
Final open flow MCF/d Final open	flow Bbl/d	•
Time of open flow between initial and final tests	Hours	And The State of t
Static rock Pressurepsig (surface pressure	e) afterHours	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.



Were core samples taken? Yes X No	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs recorded on Triple combo in surface and intermediate section. Quad combo in pilot hole TD section.	this walls re-
	OWING: 1). DETAILS OF PERFORATED INTERVALS, NGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC S AND BOTTOMS OF ALL FORMATIONS, INCLUDING SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
(See attached)	
Plug Back Details Including Plug Type and Depth(s):	
	* No.
Formations Encountered: Top D Surface:	epth / Bottom Depth
(See attached)	

.

PERFORATION RECORD ATTACHMENT

Well Number and Name: 832255 Heartwood Forestland Fund 3H

PERFO	RATION REC	ORD		STIMULATION RECORD						
	Interval Pe						luid		ing Agent	Average
Date	From	To	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
2/22/2012	5,945	5,947								in good on
								<u> </u>		\vdash
								† — —		
									 	
										<u> </u>
								i		
								T		
								1		
									f	
										1

VERTICAL PILOT HOLE

Formation/Lithology SS	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
	0		692	692
SHALE SS (SUAL E	692	692	720	720
SS/SHALE	720	720	790	790
LS	790	790	810	810
SS	810	810	1050	1050
SHALE	1050	1050	1110	1110
SS	1110	1110	1170	1170
SHALE	1170	1170	1318	1318
SS	1318	1318	1350	1350
SHALE	1350	1350	1380	
SS	1380	1380	1500	1380
SHALE/SS	1500	1500	1738	1500
BIG LIME	1738	1738	1915	1738
BIG INJUN	1915	1915	1913	1915
SHALE/SS	1961	1961		1961
SS	2012	2012	2012	2012
SHALE/SS	2610	2610	2610	2610
SS/SHALE	2634	2634	2634	2634
LS	3840	3840	3840	3840
SS	3870	3870	3870	3870
RHINESTREET	4920	4920	4920	4920
MIDDLESEX	- 1 320 5797		5797	5797
GENESEO	5884	5797	5884	5884
TULLY		5884	5894	5894
MARCELLUS	5894	5894	5907	5907
ONONDAGA	5907	5907	5961	5961
TD	5961	5961	6119	6119
10	6119	6119		

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11-28-2012	
API#:	47-069-00107	

arm name: Chad Glauser OHI 8H	Operator W.	-11 Nr 924224		
OCATION: Elevation: 1250		ell No.: 834321		
JOHNSON. Lievation. 1200	_ Quadrangle:	Valley Grove		······
District: Triadelphia	_ County: Ohio)		
Latitude: 3940' Feet South of 40 Deg Longitude 4290' Feet West of 80 Dec	. 02 Mi	n. 30 Se	c.	
Longitude 4290' Feet West of 80 Deg	g. <u>35</u> Min	n. <u>00</u> Se	c.	
Company: Chesapeake Appalachia, L.L.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill
Oklahoma City, OK 73154-0496	20"	100'	100'	up Cu. Ft. 348 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	744'	744'	797 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2203'	2203'	954 Cu. Ft.
Date Permit Issued: 2-6-2012	5 1/2"	13095'	13095'	
Date Well Work Commenced: 6-28-2012	T	10000	10030	3112 Cu. Ft.
Date Well Work Completed: 8-30-2012	 			
Verbal Plugging:		 		
Date Permission granted on:	 	 	 	
Rotary Cable Rig				
Total Vertical Depth (ft): 6493'				
Total Measured Depth (ft): 13103'				
Fresh Water Depth (ft.): 30',300'				
Salt Water Depth (ft.): 1135'				
Is coal being mined in area (N/Y)? Y				
Coal Depths (ft.): 678'				
Void(s) encountered (N/Y) Depth(s) N				
			L	
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 7	ns please includ	le additional da	ta on separate sh	eet)
Gas: Initial open flow MCF/d Oil: Initial open flo	one depth (ft)6.5	1/4		
Final open flow Not Tested MCF/d Final open flow	RHI	/d		
Time of open flow between initial and final tests	Hours	, w		
Static rock Pressurepsig (surface pressure) after	erHours	3	$\int_{R} \int_{\mathbb{R}^{2}} \mathcal{L}_{x} \left[\mathcal{L}_{x}^{2} \right]$	Experience and assert
Second producing formation Pay zone	-		THES	enements of one cour
			1 ~-	** ** *** (S)
Gas: Initial open flowMCF/d Oil: Initial open flowMCF/d Final open flow	bwBbl		UEI	i tro zunz
vpon 100 IVICI/U rinai open flow	Bbl	'd	1 2 0	
Time of open flow between initial and final tests			12.47	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marley Williams

12-5-3012 Date

Were core samples taken? YesNo_X	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs recorded on this Triple Combo in Surface and Intermediate sections. MWD GR in curve and lateral section	
NOTE: IN THE AREA BELOW PUT THE FOLLOW FRACTURING OR STIMULATING, PHYSICAL CHANGI DETAILED GEOLOGICAL RECORD OF THE TOPS A COAL ENCOUNTERED BY THE WELLBORE FROM SUR	VING: 1). DETAILS OF PERFORATED INTERVALS, E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:	
(See attached)	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Depth Surface:	/ Bottom Depth
(See attached)	

PERFORATION RECORD ATTACHMENT

Well Number and Name: 834321 Chad Glauser OHI 8H

PERFO	RATION RE	CORD	STIMULATION RECORD							
	Interval F	Perforated				F	luid	Proppi	ing Agent	Average
Date	From	То	Date	Interval	Treated	Туре	Amount	Туре	Amount	Injection
8/13/2012	12,539	12,965	8/23/2012	12,539	12,965	Slk wtr	10,294	Sand	604,480	79.9
8/23/2012	12,032	12,456	8/23/2012	12,032	12,456	Slk wtr	10,376	Sand	602,860	79.4
8/23/2012	11,524	11,948	8/24/2012	11,524	11,948	Sik wtr	10,309	Sand	605,420	78.5
8/24/2012	11,015	11,440	8/24/2012	11,015	11,440	Sik wtr	10,348	Sand	602,620	78.8
8/25/2012	10,507	10,932	8/25/2012	10,507	10,932	Sik wtr	10,308	Sand	597,500	79.6
8/25/2012	9,999	10,424	8/25/2012	9,999	10,424	Sik wtr	10,320	Sand	598,140	79.7
8/28/2012	9,491	9,916	8/28/2012	9,491	9,916	Sik wtr	10,347	Sand	597,280	79.7
8/29/2012	8,983	9,408	8/29/2012	8,983	9,408	Slk wtr	10,420	Sand	598,600	80.4
8/29/2012	8,475	8,900	8/29/2012	8,475	8,900	Slk wtr	10,303	Sand	603,960	79.7
8/30/2012	7,966	8,392	8/30/2012	7,966	8,392	Slk wtr	10,140	Sand	600,620	79.9
8/30/2012	7,458	7,883	8/30/2012	7,458	7,883	Sik wtr	10,337	Sand	597,820	79.7
8/31/2012	6,950	7,375	8/30/2012	6,950	7,375	Sik wtr	10,229	Sand	598,680	80
						_				
			 				 			
	-,,									

LATERAL WELLBORE

Maximum TVD of wellbore: 6493 ft TVD @ 13103 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	678	678
PITTSBURGH COAL	678	678	687	687
SS/SLTSTN	687	687	800	800
SHALE	800	800	1080	1080
SS/SHALE	1080	1080	1320	1320
SHALE	1320	1320	1440	1440
SS	1440	1440	1590	1590
SHALE	1590	1590	1694	1694
BIG LIME	1694	1694	1720	1720
BIG INJUN	1720	1720	1964	1964
SHALE	1964	1964	2280	2280
SS/SHALE	2280	2280	2340	2340
SHALE	2340	2340	3206	3206
SS/SHALE	3206	3206	3270	3270
SHALE/SS	3270	3270	3330	3330
SHALE	3330	3330	6378	6243
GENESEO	6378	6243	6406	6260
TULLY	6406	6260	6467	6294
HAMILTON	6467	6294	6777	6408
MARCELLUS	6777	6408	13103	6493
TD	13103	6493		0

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11-28-2012	
API#:	47-069-00136	

Farm name: Chad Glauser OHI 5H	_ Operator We	ll No.: 835090				
LOCATION: Elevation: 1240'	Quadrangle:	Valley Grove				
District: Triadelphia	County: Ohio					
	eg. 02 Min. 30 Sec.					
Longitude 4310' Feet West of 80 De	g. <u>35</u> Min	ı. <u>00 </u>	c.			
Company: Chesapeake Appalachia, L.L.C.						
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.		
Oklahoma City, OK 73154-0496	20"	100'	100'	409 Cu. Ft.		
Agent: Eric Gillespie	13 3/8"	745'	745'	1080 Cu. Ft.		
Inspector: Bill Hendershot	9 5/8"	2200'	2200'	1030 Cu. Ft.		
Date Permit Issued: 7-17-2012	5 1/2"	11757'	11757'	2784 Cu. Ft.		
Date Well Work Commenced: 7-21-2012						
Date Well Work Completed: 8-23-2012						
Verbal Plugging:						
Date Permission granted on:						
Rotary Cable Rig						
Total Vertical Depth (ft): 6429'						
Total Measured Depth (ft): 11757'						
Fresh Water Depth (ft.): 576'						
Salt Water Depth (ft.): 1135'						
Is coal being mined in area (N/Y)? Y						
Coal Depths (ft.): 678'						
Void(s) encountered (N/Y) Depth(s) N						
OPEN FLOW DATA (If more than two producing formati	ions please inclu	de additional d	ata on canarata c	heat)		
	zone depth (ft)		ata on soparate si	nect)		
Gas: Initial open flowMCF/d Oil: Initial open						
Final open flow Not Tested MCF/d Final open flo			1.00			
Time of open flow between initial and final tests			1 24 g	是的模拟的 。		
static fock Pressure	itteinou	18	Will Co	erene of OHROPE		
Second producing formation Pay zo	• • • —		DFI	C 0 6 Zuiz		
Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Oil: Initial open flow				~ ~ ~ ZOIC		
Final open flow MCF/d Final open flow Time of open flow between initial and final tests						
Static rock Pressure psig (surface pressure) a						
Fo.9 (amino, m				· · · · · · · · · · · · · · · · · · ·		

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Madire Lillians
Signature

12.5-3012 Date

Were core samples taken? YesNo_X	Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical logs recorded on thi MWD GR in the curve and lateral sections	s well? If yes, please list
FRACTURING OR STIMULATING, PHYSICAL CHANG	VING: 1). DETAILS OF PERFORATED INTERVALS, E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC AND BOTTOMS OF ALL FORMATIONS, INCLUDING RFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
(See Attached)	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Der Surface:	th / Bottom Depth
(See attached)	
(Occ attached)	
(Occ analysis)	
·	
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PERFORATION RECORD ATTACHMENT

Well Number and Name: 835090 Chad Glauser OHI 5H

PERFO	PERFORATION RECORD		STIMULATION RECORD							
		erforated				F	luid	Propp	ing Agent	Average
Date	From	То	Date	Interval	Treated	Type	Amount	Туре	Amount	Injection
8/11/2012		11,612	8/18/2012	11,283	11,612	Sik wtr	7,770	Sand	401,220	78
8/18/2012		11,205	8/18/2012	10,875	11,205	Slk wtr	7,524	Sand	401,280	79.7
8/18/2012	10,468	10,797	8/19/2012	10,468	10,797	Slk wtr	7,389	Sand	400,620	79
8/19/2012		10,390	8/19/2012	10,060	10,390	Slk wtr	7,626	Sand	399,220	79.1
8/19/2012	9,653	9,982	8/19/2012	9,653	9,982	Slk wtr	7,607	Sand	399,260	79.7
8/19/2012		9,575	8/19/2012	9,245	9,575	Slk wtr	7,226	Sand	402,220	79.8
8/20/2012	8,838	9,167	8/20/2012	8,838	9,167	Sik wtr	7,495	Sand	395,820	80.1
8/20/2012	8,430	8,760	8/20/2012	8,430	8,760	Sik wtr	7,193	Sand	397,080	79.9
8/20/2012	8,025	8,355	8/20/2012	8,025	8,355	Slk wtr	7,318	Sand	397,840	79.7
8/21/2012	7,615	7,945	8/22/2012	7,615	7,945	Slk wtr	7,232	Sand	399,100	79.9
8/22/2012	7,208	7,537	8/22/2012	7,208	7,537	Slk wtr	7,283	Sand	397,400	80
8/22/2012	6,800	7,130	8/23/2012	6,800	7,130		7,187	Sand	398,460	79
-										

LATERAL WELLBORE

Maximum TVD of wellbore: 6429 ft TVD @ 6766 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	678	678
PITTSBURGH COAL	678	678	686	686
SS/SLTSTN	686	686	830	830
SHALE	830	830	1130	1130
SS/SHALE	1130	1130	1314	1314
SHALE	1314	1314	1340	1340
SS/SHALE	1340	1340	1648	1648
SHALE	1648	1648	1696	1696
SS	1696	1696	1890	1890
BIG INJUN	1890	1890	2030	2030
SHALE	2030	2030	2300	2300
SLTSTN	2300	2300	2480	2480
SHALE	2480	2480	4010	4010
SLTSTN	4010	4010	4040	4040
SHALE	4040	4040	4220	4220
SLTSTN	4220	4220	4400	4400
SHALE	4400	4400	4490	4490
SLTSTN	4490	4490	5360	5360
SHALE	5360	5360	6322	6247
GENESEO	6322	6247	6345	6263
TULLY	6345	6263	6380	6288
HAMILTON	6380	6288	6595	6396
MARCELLUS	6595	6396	11757	6363
TD	11757	6363		0

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11-28-2012	
API#:	47-009-00098	

TION: Elevation: 1225'	Quadrangle	: Steubenville Eas	t .			
District: Cross Creek	County: Bro	ooke				
Latitude: 1950' Feet South of 40						
Longitude 1580' Feet West of 80	Deg. 32M	in. 30 Se	c.			
Company: Chesapeake Appalachia, L.L.C.						
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.		
Oklahoma City, OK 73154-0496	13 3/8"	296'	296'	129 Cu. Ft.		
Agent: Eric Gillespie	9 5/8"	1765'	1765'	853 Cu. Ft.		
Inspector: Bill Hendershot	5 1/2"	10080'	10080'	2503 Cu. Ft.		
Date Permit Issued: 6-22-2011						
Date Well Work Commenced: 10-27-2011	1					
Date Well Work Completed: 7-17-2012(Rig						
Verbal Plugging:						
Date Permission granted on:						
Rotary Cable Rig						
Total Vertical Depth (ft): 5940'						
Total Measured Depth (ft): 10091'						
Fresh Water Depth (ft.): 60', 95', 200'						
Salt Water Depth (ft.): 1055'						
Is coal being mined in area (N/Y)? N						
Coal Depths (ft.): 257'						
Void(s) encountered (N/Y) Depth(s) Y 26	5'					
EN FLOW DATA (If more than two producin Producing formation Marcellus Gas: Initial open flow MCF/d Oil: Init	Pay zone depth (f	t) n/a(not frac'd) Bb1/d	iata on separate s	heet)		
Final open flowMCF/d Final			the second second	* 45 St. #1"-		
Time of open flow between initial and final Static rock Pressure psig (surface programme)						
Static fock Flessurepsig (surface pr	essure) afterfr	Juis	· · · · · ·			
Second producing formation			••	· .		
Gas: Initial open flowMCF/d Oil: Init			(del			
Final open flow MCF/d Final			4. Milana			
Time of open flow between initial and final	testsHot	irs ours	•	3. 25.45		

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marine Will Como

Date Date

Were core samples taken? YesNo_N	Were cuttings caught during drilling? Yes Y No
Were Electrical, Mechanical or Geophysical logs recorded on this v LWD GR from 5206' - 10091' MD	well? If yes, please list
NOTE: IN THE AREA BELOW PUT THE FOLLOWS FRACTURING OR STIMULATING, PHYSICAL CHANGE, DETAILED GEOLOGICAL RECORD OF THE TOPS AS COAL ENCOUNTERED BY THE WELLBORE FROM SUR	, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC ND BOTTOMS OF ALL FORMATIONS, INCLUDING
Perforated Intervals, Fracturing, or Stimulating:	
No frac or stimulating will frac 5-9-2013	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Depth Surface:	Bottom Depth
(See attached)	

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5940 ft TVD @ 10091 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS/LS	0	0	257	257
PITTSBURG COAL	257	257	350	350
SS/SH	350	350	400	400
SS	400	400	1252	1252
BIG LIME (LS)	1252	1252	1395	1395
BIG INJUN (SS)	1395	1395	1555	1555
SHALE	1555	1555	5696	5664
GENESEO (SH)	5696	5664	5715	5679
TULLY (LS)	5715	5679	5814	5743
HAMILTON (SH)	5814	5743	6043	5839
MARCELLUS (SH)	6043	5839		
TD OF LATERAL			10091	5940

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	10-25-2012	
API#:	47-051-01295	

rm name: Ray Baker 8H	Operator We	ll No.: 831193		
PCATION: Elevation: 1310'	Quadrangle: Glen Easton 7.5'			
District: Liberty	County: Marshall			
Latitude: 7060' Feet South of 39 Deg.		n. ³⁰ Se	ec.	
Longitude 14120' Feet West of 80 Deg.		n. 30 Se		
Company: Chesapeake Appalachia, L.L.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	13 3/8"	1224'	1224'	1105 Cu. Ft.
Agent: Eric Gillespie	9 5/8"	2653'	2653'	1178 Cu. Ft.
Inspector: Bill Hendershot	5 1/2"	12140'	12140'	2416 Cu. Ft.
Date Permit Issued: 9-11-2009		 		
Date Well Work Commenced: 11-19-2010				
Date Well Work Completed: 12-18-2010(Rig release date)			
Verbal Plugging:	· · · · · · · · · · · · · · · · · · ·			
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 7054'				
Total Measured Depth (ft): 12170'				
Fresh Water Depth (ft.): 395'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 375'				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 Gas: Initial open flow MCF/d Oil: Initial open fl	zone depth (ft)	n/a (not frac'd)	lata on separate s	heet)
Final open flowMCF/d Final open flow			6 61	
Time of open flow between initial and final tests				GARANTE CONTRACTOR CONTRACTOR
Static rock Pressurepsig (surface pressure) af	terHou	rs		. 1766 : 1.76%
Second producing formationPay zon			و يُولُون أَنْهِ	
Gas: Initial open flow MCF/d Oil: Initial open fl		bl/d	1	Property Someons
Final open flow MCF/d Final open flow		ol/d	, or - ver v •	· · · · · · · · · · · · · · · · · · ·
Time of open flow between initial and final tests		rs		

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

2-10-2013

Were core samples taken? YesNo_N	Were cuttings caught during drilling? Yes Y No
Were Electrical, Mechanical or Geophysical log	ogs recorded on this well? If yes, please list GR MWD from 6540' - 12170'
FRACTURING OR STIMULATING, PHY DETAILED GEOLOGICAL RECORD O	THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, YSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING BORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating	g.
Fracturing on hold	
Plug Back Details Including Plug Type and De	pth(s):
Formations Encountered: Surface:	Top Depth / Bottom Depth
,	

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 7054 ft TVD @ 12170 ft MD

702 t	12170			TD OF LATERAL
		£90 <i>2</i>	7172	MARCELLUS (SH)
٤90٧	7772	7.469	7669	(HZ) NOTJIMAH
7.469	7669	۷۶69	8969	דטבנץ (נג)
4 769	8969	8769	S 1 69	GENESEO (SH)
8769	S 1 69	0677	7490	SHALE W/ SS
2490	7490	750	7500	816 เทาบห (รร)
2260	7260	5510	2210	BIC FIME
2210	2210	00ST	0051	SHALE W/ LS
1200	1200	588	382	SHALE W/ MINOR 55
385	385	SZS	375	PITTSBURG COAL
375	SZE	0	0	SILTSTONE/LS
Bottom Depth, TVD (ft)	Bottom Depth, MD (ft)	Top Depth, (11) GVT	Top Depth, MD (ft)	Formation/Lithology

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	10-25-2012	
API#:	47-051-01328	

Farm name: Ray Baker 6H		Operator Well No.: 831605			
LOCATION: Elevation: 1310'		Quadrangle: Glen Easton 7.5			
	District: Liberty	County: Marsh	nail		
	Latitude: 7070' Feet South of 39 Deg.				
		37 Min			
	Company: Chesapeake Appalachia, L.L.C.				
	Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	Oklahoma City, OK 73154-0496	13 3/8"	1169'	1169'	1212 Cu. Ft.
	Agent: Eric Gillespie	9 5/8"	2676'	2676'	1143 Cu. Ft.
	Inspector: Bill Hendershot	5 1/2"	11830'	11830'	2975 Cu. Ft.
	Date Permit Issued: 11-24-2009				
	Date Well Work Commenced: 10-17-2010				
	Date Well Work Completed: 11-18-2010(Rig release date)				
	Verbal Plugging:				
	Date Permission granted on:				
	Rotary Cable Rig				
	Total Vertical Depth (ft): 7065'				
	Total Measured Depth (ft): 11830'				
	Fresh Water Depth (ft.): 395'				
	Salt Water Depth (ft.): N/A				
	Is coal being mined in area (N/Y)? N				
	Coal Depths (ft.): 375', 1029'				
	Void(s) encountered (N/Y) Depth(s) N				
	N FLOW DATA (If more than two producing formation Producing formation Marcellus Pay 2 as: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow	cone depth (ft)_ owBt	/a (not frac'd)	ata on separate s	heet)
	Time of open flow between initial and final tests			المشتهرين	er (1887)
S	tatic rock Pressurepsig (surface pressure) af	terHour	rs .		
	econd producing formation Pay zon				5 1 Vet 1
G	as: Initial open flowMCF/d Oil: Initial open flowMCF/d Final open flowMCF/d		ol/d I/a	i je i	• *
	Time of open flow between initial and final tests		ı/u	\$ 6 (M)	
Static rock Pressurepsig (surface pressure) afterHours		'S		garage and secure discussion	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mallor Lillians
Signature

1<u>2-10-201</u>3 Date

Were core samples taken? YesNo_N Were cuttings caught during drilling? Yes_Y No
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR MWD FROM 6700' - 11830'
NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:
Fracturing on hold
Plug Back Details Including Plug Type and Depth(s):
Formations Encountered: Top Depth / Bottom Depth Surface:
See attached

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 7065 ft TVD @ 11830 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SILTSTONE/LS	0	0	375	375
PITTSBURG COAL	375	375	385	385
SILTSTONE/SHALE	385	385	1029	1029
COAL	1029	1029	1039	1039
SHALE W/ LS	1039	1039	1560	1560
SHALE W/ COAL	1560	1560	1590	1590
SHALE W/SS	1590	1590	2200	2200
-BIG-LIME	2200	2200	2300	2300
BIG INJUN (SS)	2300	2300	2480	2480
SHALE	2480	2480	5100	5100
SHALE/SS	5100	5100	5430	5430
SHALE W/ LS	5430	5430	7139	6919
GENESEO (SH)	7139	6919	7172	6940
TULLY (LS)	7172	6940	7215	6968
HAMILTON (SH)	7215	6968	7392	7055
MARCELLUS (SH)	7392	7055		
TD OF LATERAL			11830	7065

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	11-29-2012
API#:	47-051-01408

Farm name: Ray Baker 1H	Operator Well No.: 832774			
LOCATION: Elevation: 1310'	Quadrangle: Glen Easton			
District: Liberty	County: Marsi	hall		
Latitude: 7060' Feet South of 39 Deg.	47Min	ı. <u>30</u> Se		
Longitude 14140 Feet West of 80 Deg.	37 Min	. <u>30</u> Sec	C.	
Company: Chesapeake Appalachia, L.L.C.				
Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	13 3/8"	1213'	1213'	1240 Cu. Ft.
Agent: Eric Gillespie	9 5/8"	2644'	2644'	1201 Cu. Ft.
Inspector: Bill Hendershot	5 1/2"	13352'	13352'	2924 Cu. Ft.
Date Permit Issued: 12-15-2010				
Date Well Work Commenced: 12-24-2010				·
Date Well Work Completed: 2-4-2011(Rig release date)				
Verbal Plugging:				
Date Permission granted on:			,	
Rotary Cable Rig				
Total Vertical Depth (ft): 6982'				
Total Measured Depth (ft): 13354'				
Fresh Water Depth (ft.): 395'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 375'				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formatic	ons please inclu	ide additional d	lata on separate s	sheet)
Producing formation Marcellus Pag 2	zone depth (ft)	n/a (not frac'd)		,
Gas: Initial open flowMCF/d Oil: Initial open fl	lowB	bl/d		
Final open flow MCF/d Final open flow				assett for
Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) af			ĵ.	Freille
Static fock Pressurepsig (surface pressure) at	1100			ectived octobs one
Second producing formation Pay zon			Sept. See 19	0EC 1 1 2012
Gas: Initial open flow MCF/d Oil: Initial open fl			•	JEC 2 2 2
Final open flowMCF/d Final open flowMcF/d Final open flowmail tests			ு நடித்த	monattheri oʻ
Static rock Pressurepsig (surface pressure) af			oring Oring	DEC I I 2012 Department of Inmarrial Finitection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlone Williams
Signature

13-10-3013 Date

Were core samples taken? YesNo_N	Were cuttings caught during drilling? Yes Y No
Were Electrical, Mechanical or Geophysical logs recorded on thi	s well? If yes, please list GR MWD from 6600' - 13354'
FRACTURING OR STIMULATING, PHYSICAL CHANG	WING: 1). DETAILS OF PERFORATED INTERVALS, E, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC AND BOTTOMS OF ALL FORMATIONS, INCLUDING RFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating:	
Fracturing on hold	·
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Dep Surface:	oth / Bottom Depth
See attached	
	
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LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 6982 ft TVD @ 13354 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS/LS	0	0	375	375
PITTSBURG COAL	375	375	385	385
SILTSTONE/SHALE	385	385	2200	2200
BIG LIME	2200	2200	2481	2481
BIG INJUN (SS)	2481	2481	2580	2580
SHALE	2580	2580	2820	2820
SHALE/SS	2820	2820	3100	3100
SHALE W/ MINOR SS	3100	3100	7078	6927
GENESEO (SH)	7078	6927	7108	6947
TULLY (LS)	7108	6947	7139	6980
HAMILTON (SH)	7139	6980	7362	7062
MARCELLUS (SH)	7362	7062		
TD OF LATERAL			13354	6982

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	2012-11-29
API #:	47-9101216

Farm name: Charles H. Cather et al	Operator Well No.: 513056 Quadrangle: Rosemont				
LOCATION: Elevation: 1183					
District: Unknown	County: Tay	lor, WV			
Latitude: 39.29230 Feet South of Deg.	Mi	1Se			
Longitude_80.15006 Feet West of West Deg	Mii	ıSe	c.		
Company: EQT Production Company					
Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	44.03	
Agent: Cecil Ray	13 3/8	1,060	1,060	888	
Inspector: Brian Harris	9 5/8	2,852	2,852	1,076.95	
Date Permit Issued: 2011-02-24	5 1/2	10,371	10,371	1,118.1	
Date Well Work Commenced: 2011-05-16					
Date Well Work Completed: 2012-02-23					
Verbal Plugging:		·			
Date Permission granted on:					
Rotary Cable Rig					
Total Vertical Depth (ft): 7,721.60					
Total Measured Depth (ft): 10,376					
Fresh Water Depth (ft.): 55, 542 ft					
Salt Water Depth (ft.): 1,878 ft					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 150, 331, 470, 524, 605					
Void(s) encountered (N/Y) Depth(s)					
	<u> </u>	<u> </u>	<u> </u>		
OPEN FLOW DATA (If more than two producing formation			ata on separate s	heet)	
Producing formation Marcellus Pay : Gas: Initial open flow MCF/d Oil: Initial open flow	zone depth (ft)_	L1/4			
Final open flow 2,782 MCF/d Final open flow					
Time of open flow between initial and final tests			24.1		
Static rock Pressure 2,848 psig (surface pressure) at					
Second weedwains formation	. 1 (1 (0)				
Second producing formation Pay zo: Gas: Initial open flow MCF/d Oil: Initial open flow		bl/d			
Final open flow MCF/d Final open flow					
Time of open flow between initial and final tests					
Static rock Pressurepsig (surface pressure) af				18 3 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
gartific under namelter of last that I have no new all the second	1 6 11				
certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indivi-	and am Iamiliai viduals immedi:	with the informately responsible	nation submitted	on this document and	
hat the information is true, accurate, and complete.	· IIIIIIIGII	reshousing	e ioi ootaiiiiig t	ne miormanon i belle	
mil had					
			12-11-29		

Were core samples taken? YesNo_X Were cuttings caught during drilling? Yes	No_X
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Geophysical	
NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.	SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:	
See Attachment	
Plug Back Details Including Plug Type and Depth(s):	
Formations Encountered: Top Depth / Bottom Surface:	ı Depth
Fill 0/74 Red Rock 78/84 Fill/Clay 84/107 Red Rock 107/110 Fill 110/150 Coal 150/153	
Red Rock 169/174 Sand/Shale 174/331 Coal 331/336 Rosedale Gas Sand 336/524	
Black Shale 530/605 Coal 605/610 Gray Shale 610/955 Red Sandstone 955/13	20
Big Lime 1,320 / 1,424.65 Big Injun 1,424.65 / 1,577.04 Weir Sand 1,577.04 / 1,810	
Gantz 1,810 / 1,879.22 - Fifty Foot 1,879.22 / 1,949.82Thirty Foot 1,949.82 / 2,008.3	6
Gordon 2,008.36 / 2,128.03 Fourth Sand 2,128.03 / 2,343.85 Fifth Sand 2,343.85 /	2,371.67
Bayard 2,371.67 / 2,783.3B-5 2,783.3 / 3,001.61Speechley 3,001.61 / 3,332.79	
Riley 3,717.32 / 4,346.2Benson 4,346.2 / 4,704.67 Elk 4,704.67 / 6,572.83	
Sonyea 6,572.83 / 6,901.42 Middlesex 6,901.42 / 7,036.62 Genesee 7,036.62 / 7,29	6.36
Geneseo 7,296.36 / 7,316.42 Tully 7,316.42 / 7,369.64 Hamilton 7,369.64 / 7,502.25	
Marcellus / 7,502.25 Purcell / 7,566.8 Cherry Valley / 7,643.08	
	

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
1	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/10/2011	10228 - 10350		6,482.00	8,023.00	5 Min: 5293
					10 Min: 4894
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4762
97.00	9,128.00	6,505.00	1.28		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
197,522.00	7,079.00		2,000.00		
Stage	Formation	Frac Type			
2	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/12/2011	10078 - 10200		6,357.00	7,704.00	5 Min: 4102
					10 Min: 3802
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3661
99.20	8,519.00	5,045.00	1.09		:
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
203,835.00	5,360.00		2,000.00		
Stage	Formation	Frac Type			
. 3	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/12/2011	9928 - 10050		6,574.00	7,970.00	5 Min: 3758
					10 Min: 3535
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3412
93.40	8,496.00	4,892.00	1.07		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
200,941.00	5,524.00		2,000.00		

Stage	EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Date From / To # of perfs BD Press ATP Psi 5 Min: 4618	Stage	Formation	Frac Type			
11/12/2011 9778 - 9900 5,871.00 7,764.00 5 Min: 4618	4	MARCELLUS	Slickwater			
Avg Rate 98.60 8,600.00 5,484.00 1.15 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 Stage Formation Frac Type 5 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 9630 - 9750 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 Avg Rate Max Press Psi ISIP Frac Gradient 94.10 8,055.00 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Avg Rate Max Press Psi ISIP Frac Gradient 94.10 8,055.00 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Avg Rate Max Press Psi ISIP Frac Gradient 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press Psi ISIP Frac Gradient 11/12/2011 9478 - 9598 6,377.00 7,388.00 10 Min: 4694 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 3982 98.60 8,600.00 5,484.00 1.15 Sand Proppant Water-bbl SCF N2 Acid-Gal 202,231.00 5,258.00 2,000.00 Stage Formation Frac Type 5 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 9630 - 9750 9,517.00 7,607.00 5 Min: 4994 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 205,823.00 5,219.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Pre	11/12/2011	9778 - 9900		5,871.00	7,764.00	5 Min: 4618
Avg Rate Max Press PSI ISIP Frac Gradient 98.60 8,600.00 5,484.00 1.15						
98.60 8,600.00 5,484.00 1.15 Sand Proppant Water-bbl SCF N2 Acid-Gal 202,231.00 5,258.00 2,000.00 Stage Formation Frac Type 5 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 9630 - 9750 9,517.00 7,607.00 5 Min: 4994 Avg Rate Max Press PSi ISIP Frac Gradient 15 Min: 4365 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 5 Min: 4365 15 Min: 4365 Sand Proppant Water-bbl SCF N2 Acid-Gal 20,000.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater SIP Detail 5 Min: 4938 Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSi ISIP Frac Gradient 15 Min: 4553 <td>Avg Rate</td> <td>Max Press PSI</td> <td>ISIP</td> <td>Frac Gradient</td> <td></td> <td></td>	Avg Rate	Max Press PSI	ISIP	Frac Gradient		
Stage Formation Frac Type	-	8,600.00	5,484.00			10 Willi. 0002
Stage Formation Frac Type	Sand Proppant	Water-bbl	SCE NO	Aoid Col		2
Stage Formation Frac Type 5 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 9630 - 9750 9,517.00 7,607.00 5 Min: 4994 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4589 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 5 Min: 4365 15 Min: 4365 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Slickwater SIP Detail 5 Min: 4938 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4694 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal			SCF NZ			
Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9630 - 9750 9,517.00 7,607.00 5 Min: 4994 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4589 94.10 8,055.00 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 205,823.00 5,219.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal				2,000.00		
Date			E.O.E.			
11/12/2011 9630 - 9750 9,517.00 7,607.00 5 Min: 4994 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4589 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 2,000.00 Stage Formation Frac Type Slickwater SIP Detail 5 Min: 4938 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	5	MARCELLUS	Slickwater			
Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4589 94.10 8,055.00 5,699.00 1.17 Sand Proppant Water-bbl SCF N2 Acid-Gal 205,823.00 5,219.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 Sand Proppant 205,823.00 Water-bbl 5,219.00 SCF N2 2,000.00 Stage Formation 6 MARCELLUS 5lickwater Frac Type 6 MARCELLUS 5lickwater SIP Detail 5,377.00 11/12/2011 9478 - 9598 6,377.00 6,377.00 7,388.00 Avg Rate Max Press PSI 99.40 8,080.00 ISIP Frac Gradient 99.40 10 Min: 4694 15 Min: 4553 Sand Proppant Water-bbl SCF N2 Acid-Gal Acid-Gal	11/12/2011	9630 - 9750		9,517.00	7,607.00	5 Min: 4994
Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4365 94.10 8,055.00 5,699.00 1.17 Sand Proppant 205,823.00 Water-bbl 5,219.00 SCF N2 2,000.00 Stage Formation 6 MARCELLUS 5lickwater Frac Type 6 MARCELLUS 5lickwater SIP Detail 5,377.00 11/12/2011 9478 - 9598 6,377.00 6,377.00 7,388.00 Avg Rate Max Press PSI 99.40 8,080.00 ISIP Frac Gradient 99.40 10 Min: 4694 15 Min: 4553 Sand Proppant Water-bbl SCF N2 Acid-Gal Acid-Gal						10 Min: 4580
Sand Proppant Water-bbl SCF N2 Acid-Gal 205,823.00 5,219.00 2,000.00 Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi 11/12/2011 SIP Detail 5 Min: 4938 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Avg Rate 99.40 Max Press PSI New School S,743.00 1.18 10 Min: 4553 Sand Proppant Water-bbl SCF N2 Acid-Gal Acid-Gal	Avg Rate	Max Press PSI	ISIP	Frac Gradient		AND THE PROPERTY OF THE PROPER
Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4694 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	94.10	8,055.00	5,699.00	1.17		
Stage Formation Frac Type 6 MARCELLUS Slickwater Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 10 Min: 4694 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	15/15/					
Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	Stage	Formation	Erac Type			
Date From / To # of perfs BD Press ATP Psi SIP Detail 11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4694 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal			10F-12			
11/12/2011 9478 - 9598 6,377.00 7,388.00 5 Min: 4938 Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal			Chokwater		1	
Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4694 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal			# of perfs			SIP Detail
Avg Rate Max Press PSI ISIP Frac Gradient 15 Min: 4553 99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal	11/12/2011	9478 - 9598		6,377.00	7,388.00	5 Min: 4938
99.40 8,080.00 5,743.00 1.18 Sand Proppant Water-bbl SCF N2 Acid-Gal						10 Min: 4694
Sand Proppant Water-bbl SCF N2 Acid-Gal	Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4553
A SOLIC ANNOUNCE SOLI	99.40	8,080.00	5,743.00	1.18		
	Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
198,669.00 5,164.00 2,000.00	198,669.00	5,164.00		2,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type		<u> </u>	
7	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	9328 - 9450		6,705.00	7,659.00	5 Min: 5079
					10 Min: 4786
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4632
98.30	8,832.00	5,609.00	1.16		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
198,794.00	5,269.00		2,000.00		
Stage	Formation	Frac Type			
. 8	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	9178 - 9300	•	6,604.00	7,401.00	5 Min: 4930
					40.14
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 4506 15 Min: 4292
99.80	7,662.00	5,677.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
199,445.00	5,136.00		2,000.00		
Stage	Formation	Frac Type			
9	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	9028 - 9150		6,984.00	7,538.00	5 Min: 5121
					40.00
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 4742 15 Min: 4514
99.00	8,039.00	5,886.00	1.2		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
203,935.00	5,463.00	001 HZ	2,000.00	,	

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Fermation	Frac Type			
10	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	8878 - 9000		6,086.00	7,524.00	5 Min: 4611
					10 Min: 4201
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3961
99.70	7,976.00	5,701.00	1.18		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
203,679.00	5,116.00		2,000.00	4	
Stage	Formation	Frac Type			
11	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	8728 - 8848		5,937.00	6,899.00	5 Min: 4869
					10 Min: 4602
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 4602 15 Min: 4421
97.80	7,375.00	5,638.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
205,036.00	5,125.00		2,000.00		
Stage	Formation	Frac Type			
12	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/13/2011	8578 - 8714	•	6,064.00	7,077.00	5 Min: 4988
					10 Min: 4750
Avg Rate	Max Press PSI	ISIP	Frac Gradient		10 Min: 4750 15 Min: 4578
95.10	8,468.00	5,626.00	1.17		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
198,364.00	5,081.00		2,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
13	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/14/2011	8428 - 8550		5,945.00	7,235.00	5 Min: 4779
					10 Min: 4441
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4248
99.96	7,953.00	5,581.00	1.16		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
200,832.00	5,113.00		2,000.00		
Stage	Formation	Frac Type			
14	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/14/2011	8278 - 8400		5,927.00	6,876.00	5 Min: 4957
					10 Min: 4695
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 4503
96.40	7,249.00	5,501.00	1.15		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
205,957.00	5,164.00		2,000.00		
Stage	Formation	Frac Type			
15	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/14/2011	8128 - 8250		6,108.00	7,468.00	5 Min: 4113
					10 Min: 3793
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3614
98.00	8,862.00	5,191.00	1.11		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
205,236.00	5,075.00		2,000.00		

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	Formation	Frac Type			
16	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/14/2011	7978 - 8100		6,765.00	7,900.00	5 Min: 0
					10 Min: 0
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 0
78.10	8,872.00	0.00	0		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
172,144.00	5,871.00		2,000.00		
Stage	Formation	Frac Type			
17	MARCELLUS	Slickwater			
Date	From / To	# of perfs	BD Press	ATP Psi	SIP Detail
11/15/2011	7828 - 7950		6,889.00	7,219.00	5 Min: 3837
					10 Min: 3632
Avg Rate	Max Press PSI	ISIP	Frac Gradient		15 Min: 3523
99.60	8,190.00	5,001.00	1.1		
Sand Proppant	Water-bbl	SCF N2	Acid-Gal		
202,655.00	5,274.00		2,000.00		

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	_//3/13
API #:	47-041-00190 🎶

Farm name: Francis J. Lydon	Operator Well No.: AW-9465 Quadrangle: Camden 7.5'			
LOCATION: Elevation: 1028.29' (GL)				
District: Freemans Creek	County: Lewis	3		
Latitude: 900 Feet South of 39 Deg.	07 <u>Min</u>	. 30 Sec	C.	
Longitude 8300 Feet West of 80 Deg.	Min_	<u>00</u> See	3.	
Company: Dominion Transmission, Inc.				
Address: 445 West Main St.	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	13 3/8"	141'	141'	59 Cu. Ft.
Agent: James D. Blasingame	8 5/8"	1886'	1886'	297 Cu. Ft.
Inspector: Billy Hatfield	7"	2195'	510'	Existing
Date Permit Issued: June 29, 2012	4 1/2"	2174'	2174'	498 Cu. Ft.
Date Well Work Commenced: September 5, 2012				
Date Well Work Completed: October 15, 2012		<u> </u>	<u> </u>	
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig V				
Total Vertical Depth (ft): 2256'				
Total Measured Depth (ft): 2256'				
Fresh Water Depth (ft.): 75' and 500'				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 430'-434'			ļ	
Void(s) encountered (N/Y) Depth(s) No				
OPEN FLOW DATA (If more than two producing formation Producing formation Gantz - Storage Field Operations Pay of Gas: Initial open flow N/A MCF/d Oil: Initial open flow Time of open flow between initial and final tests N/A Static rock Pressure N/A psig (surface pressure) af Second producing formation N/A Pay zo Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A MCF/d Final open flow Time of open flow between initial and final tests N/A Static rock Pressure N/A psig (surface pressure) af Static rock Pressure N/A psig (surfac	zone depth (ft) low N/A	2228'-2247' 3bl/d bl/d 's urs /A 3bl/d 3bl/d 3bl/d 5bl/d	data on separate	sheet)

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

//3//3 Date

Were core samples taken? YesN	10_X	Were cutting	ngs caught during dri	illing? Yes_X	_ No
Were Electrical, Mechanical or Geophysic	al logs recorded or	this well? If yes,	, please list_Bond Log, Ga	mma, Neutron,Temp.,Casi	ng Inspection Log
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECORCOAL ENCOUNTERED BY THE WE	PHYSICAL CHA RD OF THE TO ELLBORE FROM	NGE, ETC. 2). T PS AND BOTT	THE WELL LOG V OMS OF ALL FO	VHICH IS A SYS	STEMATIC
Ran 141' of 13 3/8" casing, cut and	l pulled 1 605' c	of 7" againg no	rforated 9 5/8" ca	seina from 564	-570' with
eight shots and squeezed cement t					
packer shoe inside 7" stub and cer					
		*	"		
Plug Back Details Including Plug Type an	nd Depth(s): N/A				
				~ ~	*
Formations Encountered: Surface:	Тор	Depth	1	Bottom Do	epth
Re-work of existing well see origin	al completion r	eport.			
	2.10				
			a		
				(f	

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	1/3/13	
API #:	47-033-01510 ∜√	_

Farm name: Petitto Brothers, Inc.	Operator Well No.: CW-244				
LOCATION: Elevation: 1378.72' (GL)	Quadrangle: West Milford, 7.5'				
		·			
District: Grant Latitude: 3,755' Feet South of 39 Deg.	County: Harri	n. ³⁰ Se			
Longitude 12,180' Feet West of 80 Deg.		1. 30 Se			
Dongitudo		i. <u></u> 50	. .		
Company: Dominion Transmission, Inc.					
Address: 445 West Main St.	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.	
Clarksburg, WV 26301	10 3/4"	183'	183'	Existing	
Agent: James D. Blasingame	8 5/8"	1141'	1141'	Existing	
Inspector: Tristan Jenkins	7"	1618'	1618'	Existing	
Date Permit Issued: July 17, 2012	4 1/2"	2714'	2714'	Existing	
Date Well Work Commenced: October 22, 2012					
Date Well Work Completed: November 1, 2012					
Verbal Plugging: N/A					
Date Permission granted on: N/A					
Rotary Cable Rig 🗸					
Total Vertical Depth (ft): 2775'					
Total Measured Depth (ft): 2775'					
Fresh Water Depth (ft.): None					
Salt Water Depth (ft.): 1700'					
Is coal being mined in area (N/Y)? Y					
Coal Depths (ft.): 155'-160'					
Void(s) encountered (N/Y) Depth(s) N					
OPEN FLOW DATA (If more than two producing formation Producing formation Storage (Gantz)	zone depth (ft)	2072'-2102'	lata on separate s	sheet)	
Gas: Initial open flow N/A MCF/d Oil: Initial open fl		Bbl/d			
Final open flow N/A MCF/d Final open flow	w <u>N/A</u> B	bl/d			
Time of open flow between initial and final tests N/A	Hour	S			
Static rock Pressure N/A psig (surface pressure) at	fter <u>N/A</u> Hoi	urs		- C Gas	
Second producing formation N/A Pay zo	ne depth (ft) N	<u>/A</u>	JAN JAN	Was Cir.	
Gas: Initial open flow N/A MCF/d Oil: Initial open f	low_N/AE	Bbl/d	C. Williams	Eilir .	
Final open flow N/A MCF/d Final open flow		bl/d	Mai	<u>e</u>	
Time of open flow between initial and final tests N/A	Hour	S	J1 -	المناه المناز المناز المناز	
Static rock Pressure N/A psig (surface pressure) at	fter N/A Ho	urs	-R-5795	Care Sinieniu	
7	and am Carrilla	u with the infe	Till	d on this dominant a	

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

nature

Date

Were core samples taken? Yes	sNo_X	Were cu	nttings caught during	g drilling? Yes_X	_ No
Were Electrical, Mechanical or	Geophysical logs recorded	d on this well? If y	es, please list Bond	d Log	
NOTE: IN THE AREA B FRACTURING OR STIMUI DETAILED GEOLOGICAL COAL ENCOUNTERED BY	LATING, PHYSICAL C L RECORD OF THE 1	HANGE, ETC. 2) FOPS AND BOT). THE WELL LO TTOMS OF ALL	G WHICH IS A SY FORMATIONS, II	STEMATIC
Perforated Intervals, Fracturing,	, or Stimulating:				
N/A					
					
<u></u>					
Plug Back Details Including Plu					
cement retainer set at 2,484'	with 2 7/8" tailpipe. Sq	ueezed 2.5 bbls	. of cement into F	ourtn, Firtn, Firtn S	tray Sands.
Formations Encountered: Surface:		Top Depth		Bottom D	<u>epth</u>
				,	
Partial plugging of existing	g well see original cor	mpletion report	••		
					<u> </u>
		_			